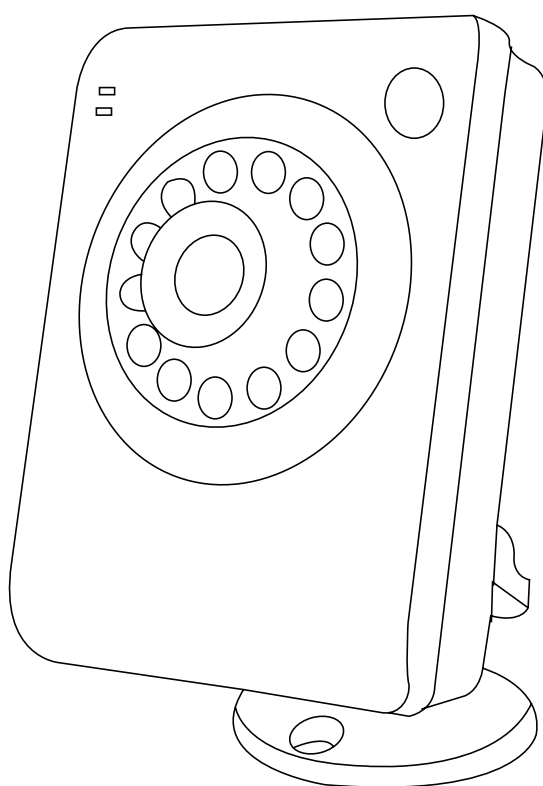




USER MANUAL

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1 Accessories

Name	Qty
IP Camera	1
5V power adapter	1
Universal holder	1
Quick Start Guide	1
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2 General Introduction

2.1 Overview

This device integrates traditional camera and network video technology. It adopts audio video data collection, transmission and storage. It can connect to the network directly without any auxiliary device.

This device uses standard H.264 video compression technology which maximally guarantees the video quality.

It can be used alone or used in a network area.

It can be connected to the network and used from a network client-end.

2.2 Features

User Management	Different user rights for each group, one user belongs to one group. The user right shall not exceed the group right.
Data Transmission	Support cable network data transmission via Ethernet. Reserved extension USB port support WIFI module.
Storage Function	Support central server backup function in accordance with configuration and setup in alarm or schedule setting. Support record via Web and the recorded file are stored in the client-end PC. Support local SD card hot swap.
Alarm Function	Real-time respond to local alarm input and video detection as user pre-defined activation setup and exert audio prompt(allow user to pre-record audio file). Realize real-time video detect such as motion detect, camera masking and video loss.
Network Monitor	Supports one-channel audio/video data transmission to network terminal. Max supports 10 connections. Adopts the following audio and video transmission protocol: HTTP, TCP, UDP, RTP/RTCP and etc. Support web access.
Network Management	Configuration and management via Ethernet. Support device management via web. Support various network protocols.
Peripheral Equipment	Support peripheral equipment connection via the RS232 port. Support serial port (RS232/RS485) transparent data transmission.
Power	External power adapter. Support DC 5V.
Assistant Function	Day/Night mode auto switch (ICR). Support system resource information and running status real-time display. Support log function. Support video watermark function.

2.3 Specifications

2.3.1 Performances

Parameter		Model	4 306 31
Camera	Sensor Type		1/4-inch CMOS
	Pixel		PAL: 640 (H) x 480 (V)
	IR distance		7-10 m
	Video format		PAL
	Shutter		1/50 - 1/10000s
	Min. Illumination		Color 0.1Lux/F1.2 B/W 0.01Lux/F1.2 (IR mode 0Lux)
	Auto Iris		N/A
	SNR		> 50dB
Video	Standard		PAL: 1f/s ~ 25f/s
	Encode Capability		H.264
	Encode Bit Stream		VGA (640 * 480) QVGA (320 * 240) CIF (352 * 288) QCIF (176 * 144) QQVGA (160 * 120)
	Video Recording Speed		PAL: 1-ch 1f/s ~ 25f/s adjustable
Network Capacity			Max support 10 network users to monitor simultaneously
Power Consumption			3W (IR on)
Power			DC 5V
Temperature			- 10°C ~ + 55°C
Working Environment Humidity			10% ~ 90%
Dimension (H * W * D)			106 mm * 102 mm * 127 mm

2.3.2 Function specification

Specification		Note
CCD Video	Mirror	Support left-right video switch.
Process	Flip	Support video upside down flip function.
	Scene Mode	Support scene mode setup.
Video	Resolution	VGA, QVGA, CIF, QCIF, QQVGA
	Video Compression S	Standard H.264 compression format
	Motion Detection	Take 18*22 pix as a macro unit. Support 396 detection zones. Sensitivity level ranges from 1 to 6.
	Dual-stream	2-ch real-time VGA.
Network		WEB access via IE browser.
		PPPoE dial function
		DHCP auto get IP address
		DDNS
		SMTP email function
		NTP time synchronization.
		DNS domain parse
		IP address auto search function
Record	Schedule Record	Support max 6 periods.
	Manual Record	After enabling manual record, no matter system is in schedule or alarm status or not, system just begins recording.
	Alarm Record	System automatically enables recording function when alarm occurred.
	Motion Detection Record	When input video changes, system automatically enables record operation.
OSD	Time Title Display	There are 255 layers. 0 is the bottom layer and 255 is the highest layer. 0 means completely transparent and 255 is opaque.
	Channel Title Display	Please refer to the above information.
	Privacy Mask	Max supports 4 zones.
Storage	Network storage based on SDK	
	Local SD card storage, support high-speed card/low-speed card.	
Alarm	Integrated PIR	
Event Management	Send out motion detect alarm notice via email.	
	Send out the picture via the email.	
Control	RS232 for debug	
On-line Upgrade	Network remote upgrade Support upgrade tool.	
	COM upgrade Upgrade from network via COM command.	
Device Management	COM control platform View IPC running status or IPC parameter via COM port.	
	Network client-end Log in the client-end software in the PC to monitor IPC.	

Specification	Note
Parameter Configuration	IPC provides user interface, device information, video information, COM setup, record setup, motion detection setup, alarm setup, OSD information interfaces to modify system setup.
	IPC provides running information such as user port, log, status, user management, email setup, date modification.
Log	System can record the important event log record Record the following information, System operation, setup operation, alarm event, record management, user management, clear log.
Digital watermark	Prevent from unauthorized data modification.
Power Supply	DC 5V power supply
RESET	Support hardware reset. System needs to reboot to activate the default setup.
Port ESD protection	9-pin input/output port
	Network port
	5V power adapter
Others	One red/green power status indication light.
	One yellow network connection indication light
	IR light
Installation	Bracket installation

2.3.3 Factory Default Setup

Function configuration type		Item Name	Default setup	
General Setup		Date format	DD MM YYYY	
		DST	Enable	
		Date separator	‘ / ’	
		Time format	24H	
		Language	English	
		When HDD is full	Overwrite	
		Record duration	8 min	
		Device No.	8	
		Video type	PAL	
		Encode Setup	Main stream	Channel
Compression Audio/Video	H.264 Enable audio and video			
General bit stream	Main stream			
Resolution	VGA			
Frame rate	12			
Bit stream control	VBR			
Quality	High			
Bit stream value	1536			
I frame interval control	24			
Extra stream	Extension stream		Main stream	
	Audio/Video enable		Enable audio and video	
	Resolution		CIF	
	Frame rate		12	
	Bit stream control		VBR	
	Quality		High	
	Bit stream value		396	
	I frame interval control		24	
	Image color		Brightness: 50 Contrast: 50 Saturation: 50 Hue: 50	
	Watermark		Enable Stream type: all Type: Character Character: DigitalCCTV	
	Privacy Mask		Never	
	Time title		Enable. OSD transparent: 128	
	Channel title		Enable. OSD transparent: 128	
Shedule setup		Channel	Ch01	
		Pre-record		5 seconds
		Time Setup	Start time	0:00:00
			End-time	23:59:59
			Record	All Period: Enable motion detec- tion/alarm

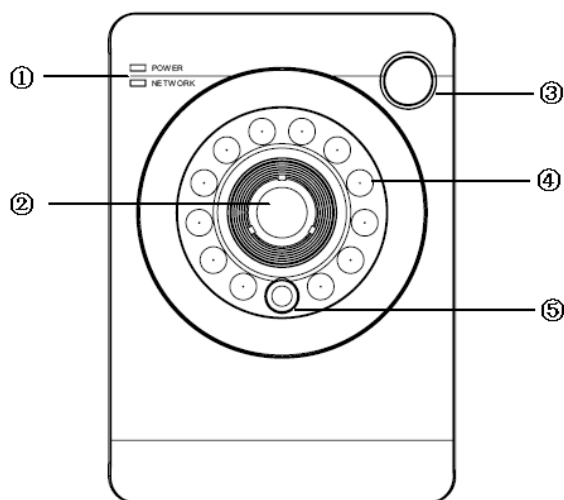
Function configuration type	Item Name		Default setup
Shedule setup	Time Setup	Snapshot	All Period : Enable motion detection/alarm
		Week	All week
COM Setup	Option		COM01
	Function		Console
	Data bit		8
	Stop bit		1
	Baud rate		115200
	Parity		None
Network setup	Ethernet		Port 01
	DHCP		Enable
	IP address		192.168.1.108
	Subnet mask		255.0.0.0
	Gateway		192.168.0.1
	Device name		Compact Soho
	TCP port		37777
	HTTP port		80
	UDP port		37778
	Network user connection amount		20
	Network transmission QoS		Disable
	Remote host		Multiple broadcast group
	Multicast IP Address		239.255.42.42
	Port		36666
	Email setup		Disable
	Multiple DDNs		Enable with "No IP" as default
	NAS setup		Disable
	NTP setup		Disable
	IP Filter		Disable
Alarm setup	Event type		Local input
	Alarm input		Input 01, disable
	Type		Normal open
	Period		Period: Start time 0:00:00 End time: 23:59:59 All period: enable Week: All weeks
	Anti-dither		0 second
	Record channel		1, enable
	Record latch		10 seconds
	Send email		Disable
Alarm setup	PTZ activation		Disable Event type: never Address: 0
	Capture		Disable

Function configuration type	Item Name		Default setup
Video detection	Event type		Motion detection
	Channel		Ch01, Enable
	Sensitivity		3
	Time period setup		Period: Start time 0: 00:00 End time: 23:59:59 All period: enable Week: All weeks
	Anti-dither		0 second
	Record channel		1, enable
	Record latch		10 seconds
	Send email		Disable
	PTZ activation		Event type: Never Address: 0 Disable
	Capture		Disable
PTZ Setup	Channel		Ch01
	Protocol		None
	Address		1
	Baud rate		9600
	Data bit		8
	Stop bit		1
	Parity		None
Default and Backup	All		Disable
	General		Disable
	Encode		Disable
	Schedule		Disable
	RS232		Disable
	Network		Disable
	Alarm		Disable
	Video detection		Disable
	Maintain		Disable
	Channel No.		Disable
Advanced	Abnormity	Even Type	No disk, Disable
		Send email	Disable
	User account		admin/admin (reusable) 888888/888888(reusable) 666666/666666(reusable) default
	Snapshot	Channel	Ch01
	Snapshot	Snapshot mode	Snapshot_Timing
		Frame rate	1f/s
		Resolution	VGA
		Quality	60%
	Auto maintain	Auto reboot	Never
		Auto delete old files	Never

Function configuration type	Item Name	Default setup
Camera config	Channel	1
	Exposure Mode	Auto
	Night Vision	Auto
	Backlight Compensation	N/A
	Signal Type	INT
	Mirror	Disable
	Flip	Disable
Auto Registration	SN	1
	IP	0.0.0.0
	Port	7000
DNS Setup	DNS	202.101.172.35
	Alternative DNS	202.101.172.35

3 Framework

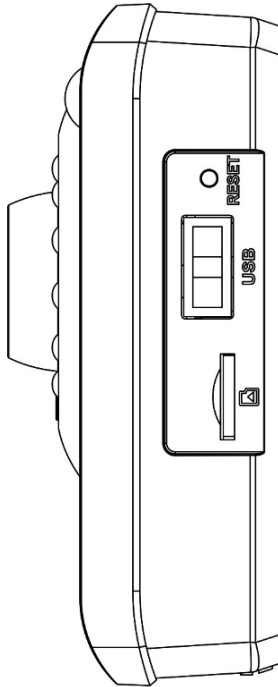
3.1 Front Panel



Port	Port Name	Function
Port 1	POWER	Power indication light. When system is recording, the green light flashes. The interval is 0.5s. When system is running: The red light becomes on when system boots up. When system is running properly, the green light becomes on. When system is upgrading, the red light flashes. The interval is 0.5s.
	NETWORK	Network indication light. The yellow light flashes when network connection is proper.
Port 2	/	Device lens
Port 3	PIR receiver enclosure	Passive IR motion detect port. It can detect the object of the IR radiant (such as the human body or other heating object.)
Port 4	IR Light	It is to send out the IR compensation light to enhance the night vision effect.
Port 5	Photosensitive resistance	It is to sense the environment illumination to open/close the IR light.

3.2 Side Panel

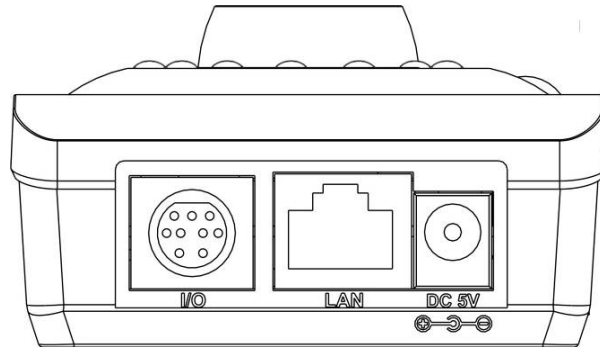
Refer to the following figure for side panel information.



Port Name	Function
SD card port	Micro SD card port. You can insert the SD card. Please format the SD card via the WEB if it is your first time to use it.
USB port	USB Port. You can connect to the WIFI module or 3G module.
RESET	Press it for at least 5 seconds and then release, you can reboot the device.

3.3 Bottom Panel

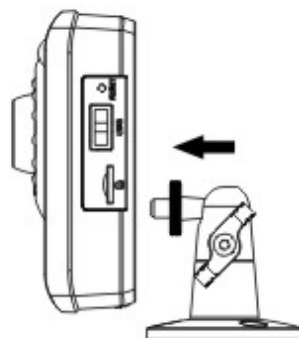
Refer to the following figure for Bottom panel information.



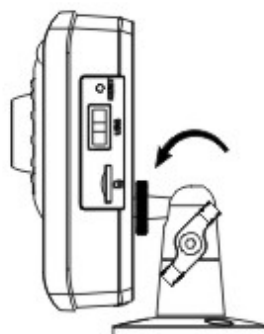
Port Name	Function
I/O Port	I/O port, connect to MD9M data converter cable
LAN	10M/100M self-adaptive Ethernet port. Connect to the network cable.
DC 5V	Power input port. Input DC 5V.

4 Installation

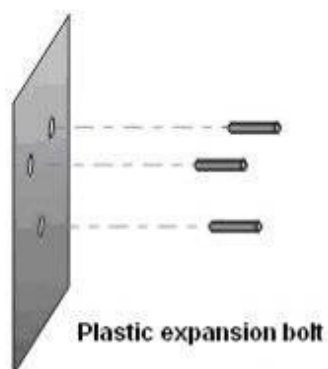
- 1- Place the gasket in the universal holder
- 2- Place the end of the holder to the screw hole in the real panel of the device.



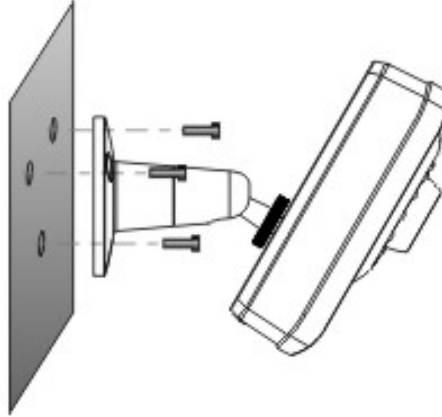
- 3- Turn the universal holder clockwise to fix the device firmly.



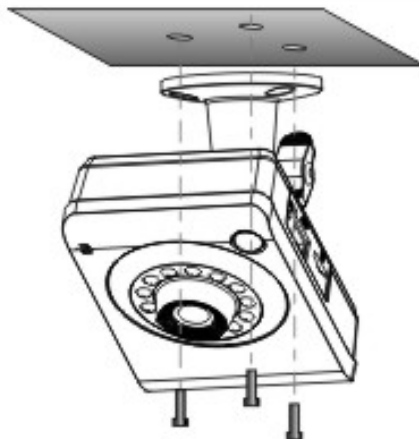
- 4- Dig three holes in the wall (or in the ceiling) in accordance with the holes of the universal holder.



5- Insert the three screws of the universal holder to the holes you just dug, and then fix the screws firmly.



6 - Turn the knob to adjust the IP camera to the suitable angle.



5 Quick Configuration Tool

The quick configuration tool allows you to search for a device's IP address, even if it is in another segment (cameras, DVR, NVR, encoders and decoders) and to modify it. The configuration tool is available on the CD supplied with the product.

It also allows the software to be upgraded or certain parameters to be modified.

This tool is used to connect to devices with an IP address in the same segment only.

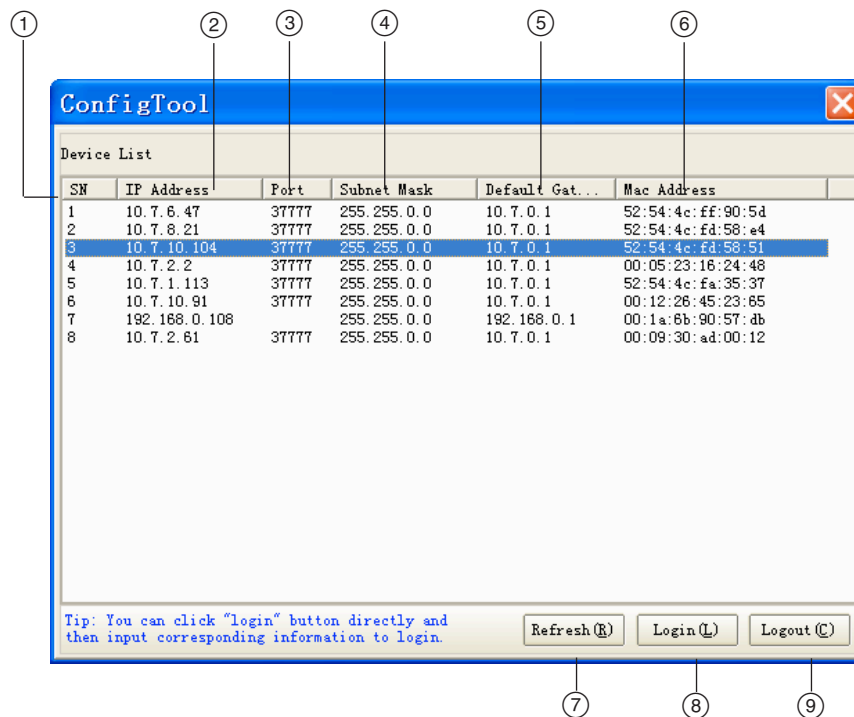
5.1. First Connection

5.1.1 Connection with the configuration tool (to change the IP address or upgrade a device's internal software)

To open the software, double click the "ConfigTool.exe" icon on the CD supplied with the product.

To search for devices connected to the network:

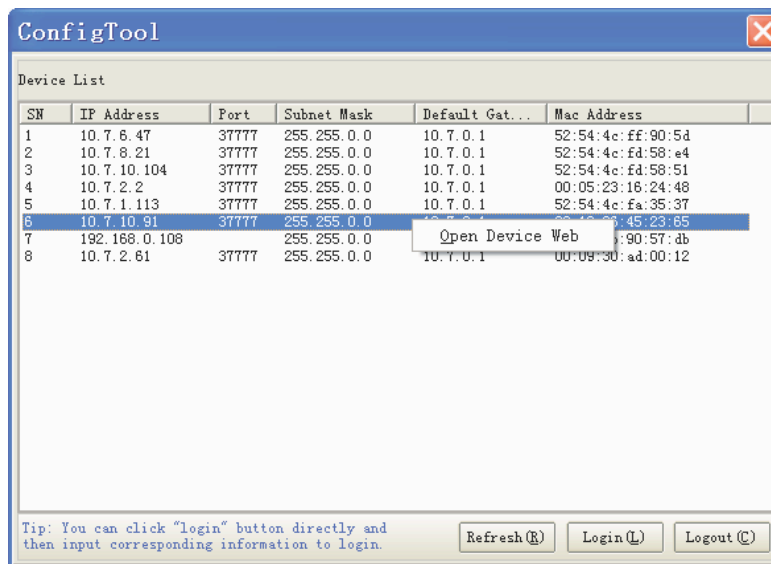
- Click the "Refresh" button; the tool will search for devices connected to the network and display it in the form of a list.



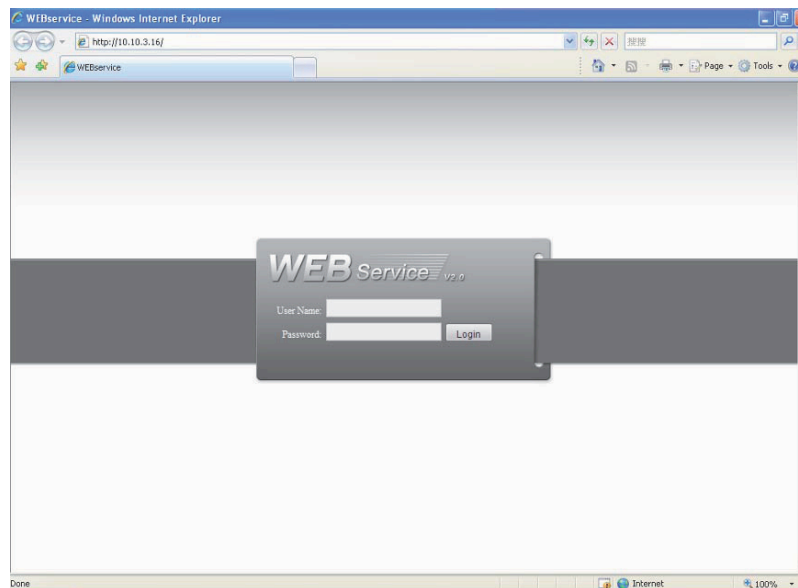
	Description
①	Number
②	Device IP address
③	Device TCP port
④	Device subnet mask
⑤	Device default gateway
⑥	Device MAC address
⑦	Refresh the list
⑧	Access to the camera's network configuration menu
⑨	Disconnection from the camera's network configuration menu

To connect to a device and open the web application:

- Highlight it (single click in the list).
- Right click the highlighted line.



- Click on "Open Device Web".
- The following web page opens:



If the connection fails:

- either the camera does not have an IP address in the same segment as the PC (see chapter 5.1.2 to change it),
- or the Internet Explorer security parameters are not set correctly (see chapter 6 to change them).

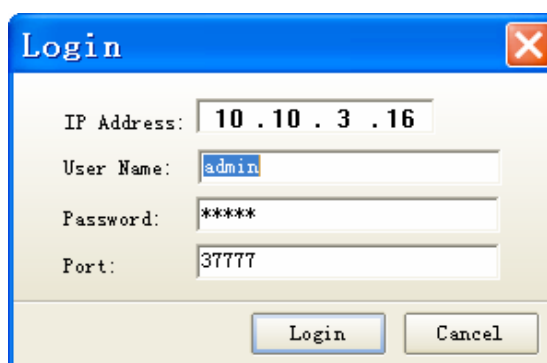
5. 1.2 Connection with the configuration tool (to change the IP address or upgrade a device's internal software)

To search for devices connected to the network:

- Click the «Refresh» button; the tool will search for devices connected to the network and display them in the form of a list (see chapter 5.1.1 for details of the interface).

To connect to a device:

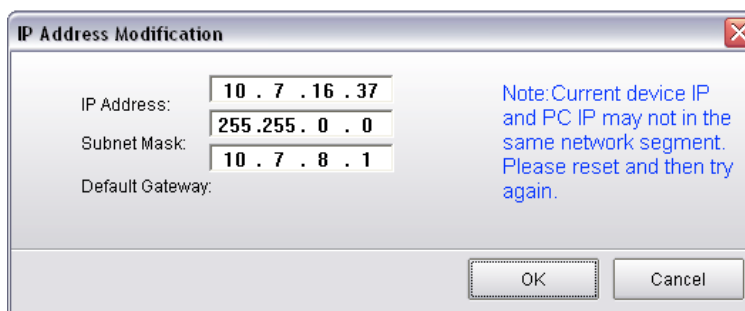
- Highlight it (single click in the list).
- Click on button ⑧ (or double click on the highlighted line).
- The following window opens:

A login dialog box with a blue title bar and a close button. It contains four input fields: IP Address (10 . 10 . 3 . 16), User Name (admin), Password (*****), and Port (37777). At the bottom are Login and Cancel buttons.

Function	Note
IP address	Device IP address
User name	Device user name
Password	Device password
Port	Device TCP port
Login	Connection
Cancel	Cancel

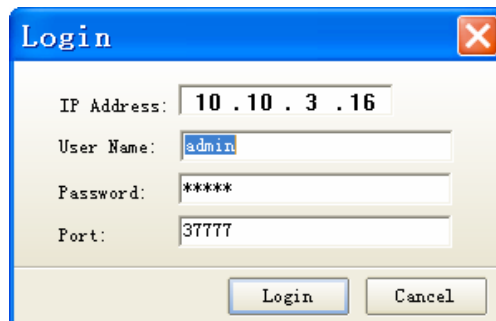
Click "Login" once the information has been entered.

If the following screen appears, this means that the device address is not in the same IP addresses segment as the PC on which the configuration tool is currently running. It will therefore not be possible to connect.

An IP Address Modification dialog box with a title bar and a close button. It contains three input fields: IP Address (10 . 7 . 16 . 37), Subnet Mask (255 . 255 . 0 . 0), and Default Gateway (10 . 7 . 8 . 1). A note on the right states: "Note: Current device IP and PC IP may not in the same network segment. Please reset and then try again." At the bottom are OK and Cancel buttons.

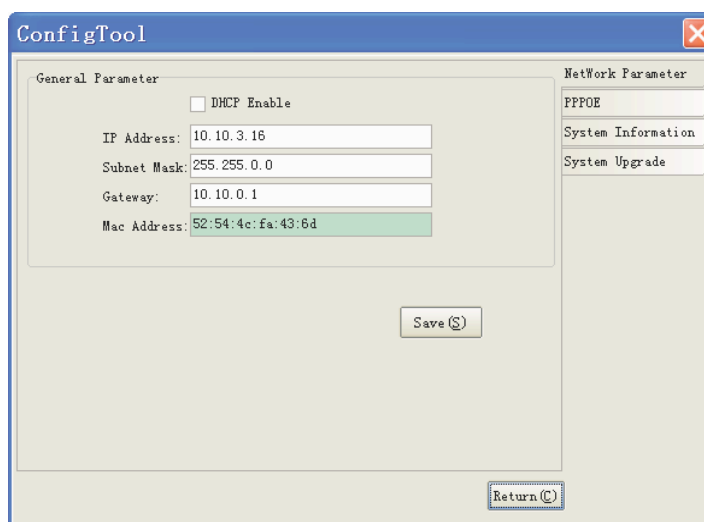
- Manually modify the IP address by entering the desired new address.
- Click OK to save the new address in the device.

- Restart the procedure. The following window should open:



A 'Login' dialog box with a blue title bar and a close button (X) in the top right corner. It contains four input fields: 'IP Address' with the value '10.10.3.16', 'User Name' with the value 'admin', 'Password' with the value '*****', and 'Port' with the value '37777'. At the bottom, there are two buttons: 'Login' and 'Cancel'.

- Click Login to access the parameter modifications.



A 'ConfigTool' configuration window with a blue title bar and a close button (X) in the top right corner. It is divided into two main sections: 'General Parameter' on the left and 'Network Parameter' on the right. The 'General Parameter' section includes a 'DHCP Enable' checkbox (unchecked), and input fields for 'IP Address' (10.10.3.16), 'Subnet Mask' (255.255.0.0), 'Gateway' (10.10.0.1), and 'Mac Address' (52:54:4c:fa:43:6d). The 'Network Parameter' section has a tabbed interface with three tabs: 'PPPOE', 'System Information', and 'System Upgrade'. At the bottom of the 'General Parameter' section is a 'Save (S)' button, and at the bottom right of the window is a 'Return (C)' button.

Function	Note
Enable DHCP	Enable or disable the DHCP function
IP address	Device IP address
Subnet mask	Device subnet mask
Gateway	Device default gateway
MAC address	Device MAC address
Save	Save
Return	Return to the search interface

5.1.2 PPPoE

Select "PPPoE" on the right-hand side of the interface:

The screenshot shows a window titled "ConfigTool" with a red close button in the top right corner. The main area is divided into two sections. The left section, titled "PPPoE", contains a checkbox labeled "PPPoE Enable" which is checked. Below this are three input fields: "User Name:", "Password:", and "IP Address:". The "IP Address" field has a green background. The right section is titled "Network Parameter" and contains three tabs: "PPPOE" (which is selected), "System Information", and "System Upgrade". At the bottom of the window are two buttons: "Save (S)" and "Return (C)".

Function	Note
Enable PPPOE	Enable or disable the PPPoE function
User name	PPPOE user name
Password	PPPOE password
IP address	Device IP address in the WAN
Save	Save
Return	Return to the search interface

- Click the "System Information" tab on the right.

5.1.3 System

Select "System Information" on the right-hand side of the interface.

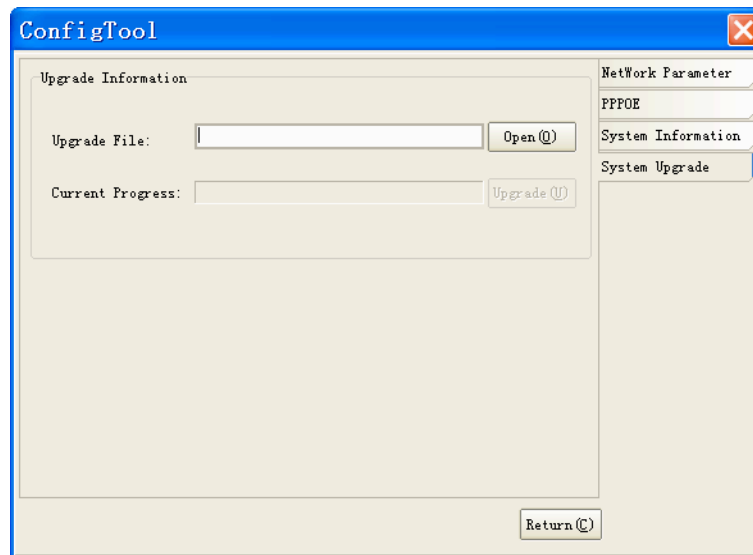
The screenshot shows the ConfigTool application window. On the right-hand side, the 'System Information' tab is selected. The 'Device Information' section contains fields for SN (PA142660904A340012), Software Version (Software Version: 1.0, Build:2009-2-1), and Device Name (PA142660-340012). The 'Date and Time' section has two options: 'Synchronization with PC' (selected) and 'Manual Setup'. Under 'Synchronization with PC', there are fields for PC Date (2009-7-9), PC Time (15:13:36), Date (2009-7-9), and Time (14:18:23). A 'Sync (S)' button is located below these fields. At the bottom of the window are 'Save (S)' and 'Return (C)' buttons.

Function	Note
SN	Device serial number
Software version	Device software version
Device name	Model name
Synchronization with PC	Synchronisation of the device date and time with the date and time on the PC. Click "Sync" to synchronise, then "Save" to save the date and time.
PC date	PC date
PC time	PC time
Manual Setup	Manual setup of the device date and time. Enter the desired date and time. Click "Sync" to synchronise, then "Save" to save the date and time.
Date	Date
Time	Time
Sync	Synchronise
Save	Save
Return	Return to the search interface

- By way of example, enter a camera name in the "Device Name" field.
- Check that "Synchronization with PC" is selected, so that the date and time are synchronised with the PC.
- Check that the date and time are correct. If not, click "Sync(S)".

5.1.4 System Upgrade

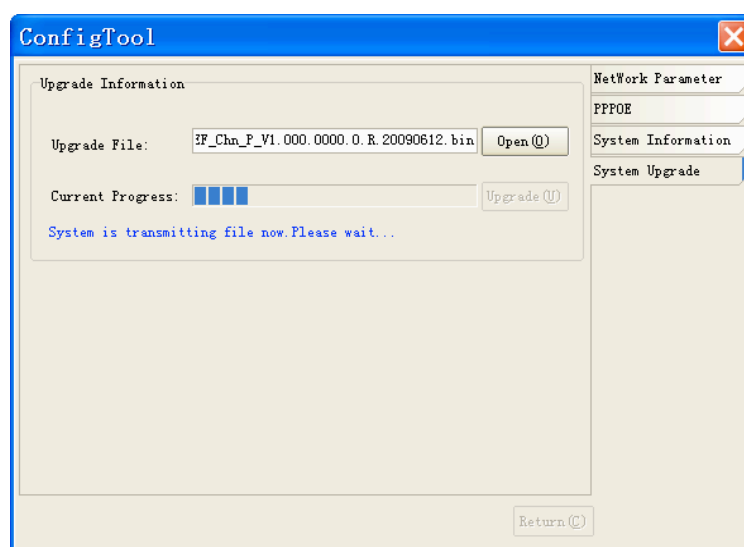
Select "System Upgrade" on the right-hand side of the interface.



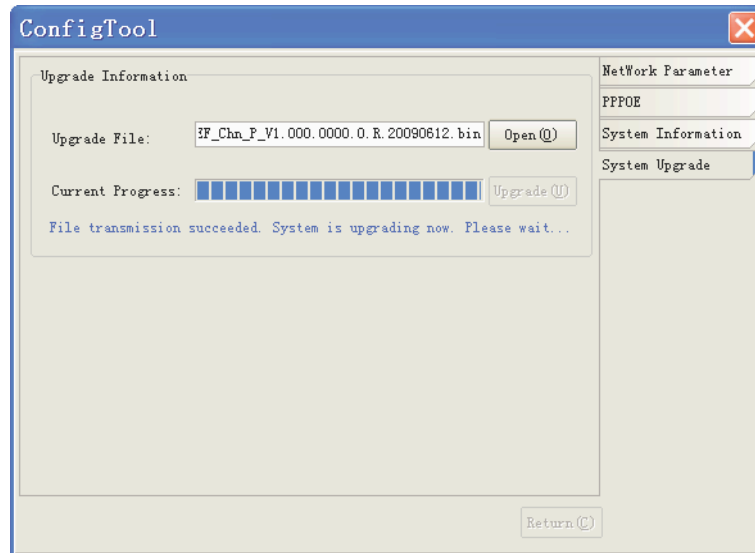
Function	Note
Upgrade file/Open	Click here to select the upgrade file.
Current progress/Upgrade	Click here to start the upgrade procedure.
Return	Return to search interface

Steps for updating the device's internal software

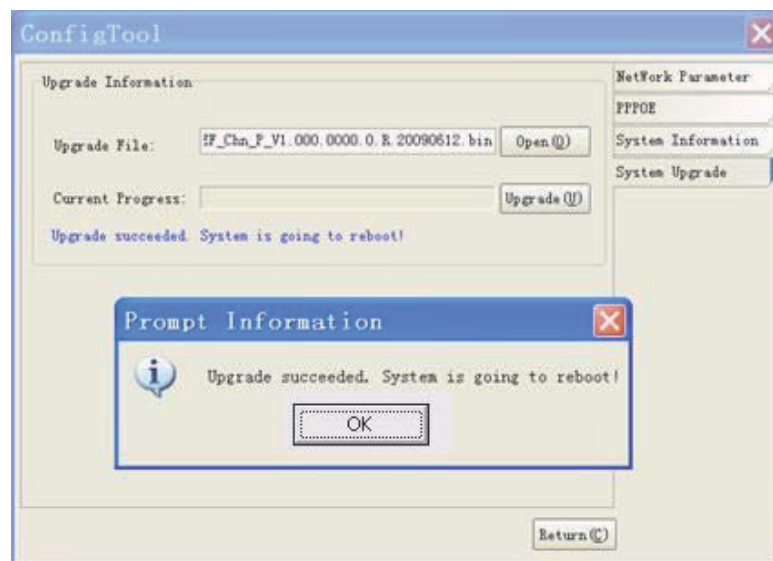
- Click on the "Open" button and select the *.bin internal software file.
- When the file has been added, click the "Upgrade" button; the file is then transmitted to the device.



- Once the file has been transferred, the device upgrades automatically.



- Once the device has been upgraded, the following dialogue box opens:



- Click OK to finish the procedure.

6 Connecting to a Device and Opening the Web Application

6.1 PC Configuration

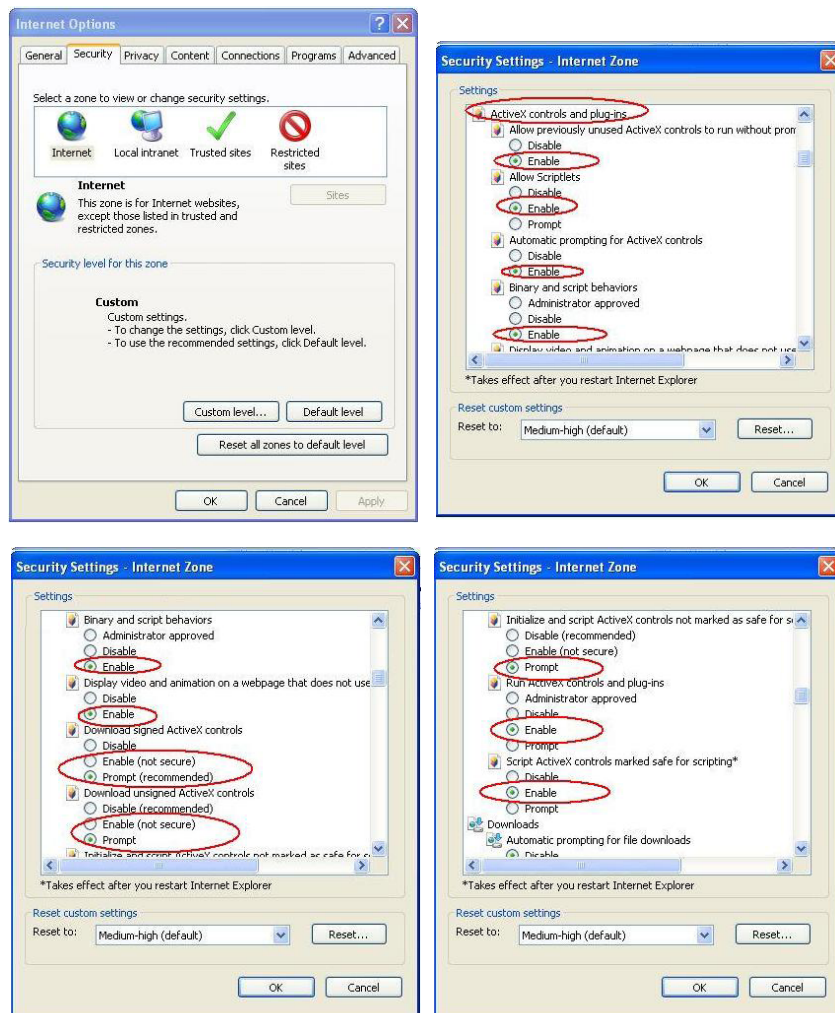
This device supports Web access and management via PC.

Web includes several modules including monitor channel list, record search, alarm setup, system configuration, PTZ control, monitor window, etc.

The system pops up warning information to ask whether you wish to install the control webrec.cab or not. Click OK; the system can automatically install the control.

When the system is upgrading, it can overwrite the previous Web application too.

If you cannot download the ActiveX file, check whether you have installed the plug-in to disable the control download. Alternatively you can lower the IE security level.

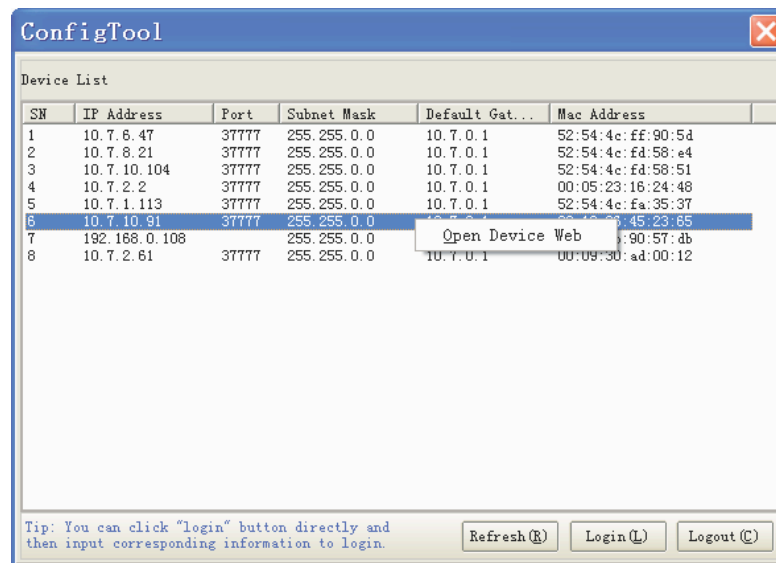


6.2 Connection with the Search Tool

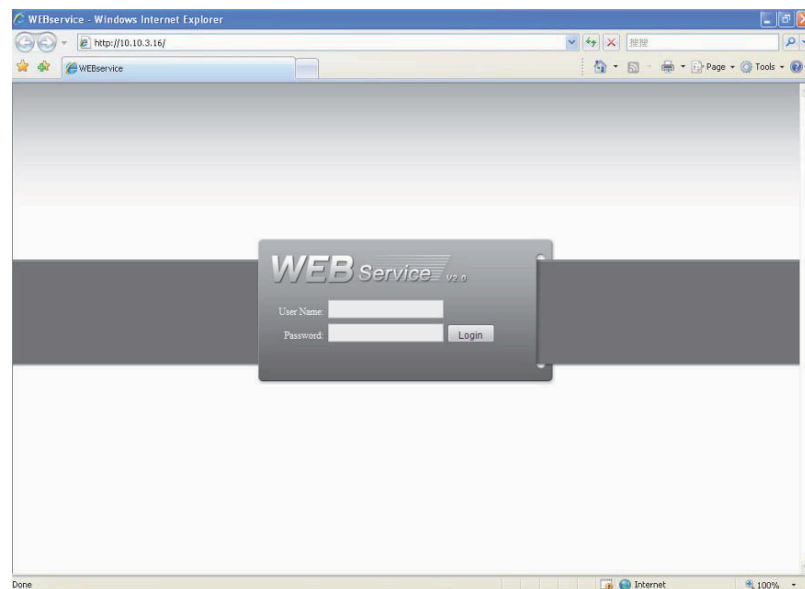
To open the software, double click the "ConfigTool.exe" icon on the CD supplied with the product.

To search for devices connected to the network:

- Click the "Refresh" button; the tool will search for devices connected to the network and display them in the form of a list.
- Highlight the device required (single click in the list).
- Right click the highlighted line.



- Click on "Open Device Web".
- The following web page opens:

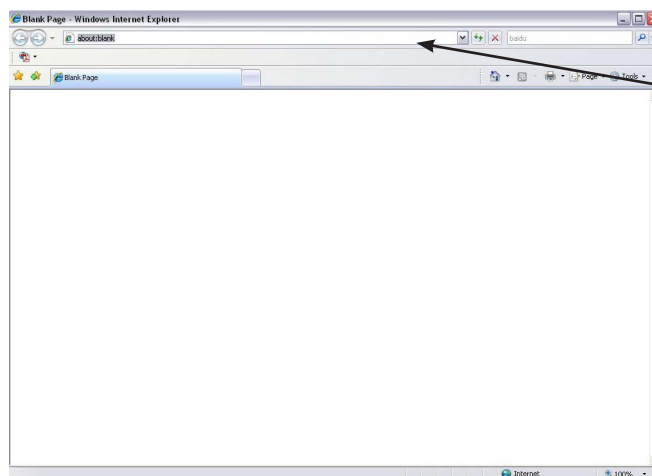


6.3 Connection with Internet Explorer

IP camera factory default setup:

- IP address: 192.168.1.108.
- User name: admin
- Password: admin

Open Internet Explorer (IE) and enter your camera IP address in the address bar.
For example, if your camera IP is 192.168.1.108, then enter http://192.168.1.108 in the IE address bar.



Input your IP
address here

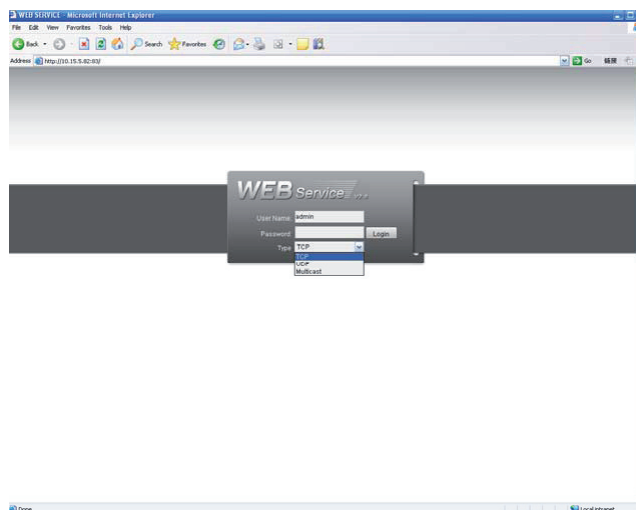
Note:

If the connection fails:

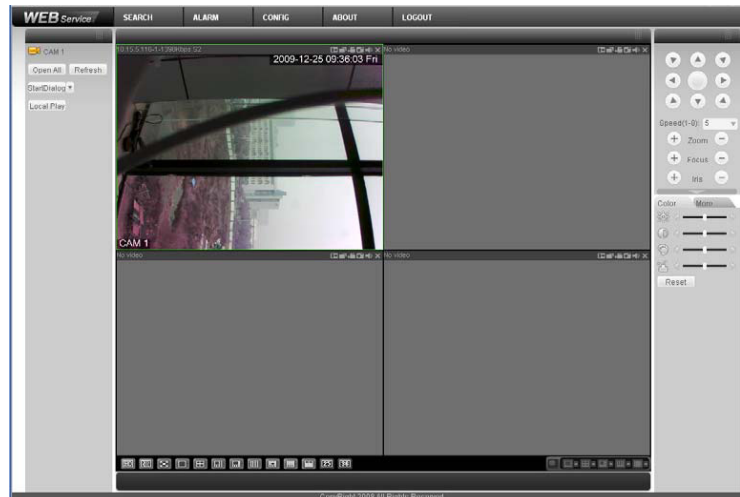
- either the camera does not have an IP address in the same segment as the PC (see chapter 5.1.1 to change it),
- or the Internet Explorer security parameters are not set correctly (see chapter 6.1 to change them).

6.4 Login

- Enter your user name and password.
(Default factory name is admin and password is admin.)
The login type includes: TCP/UDP/Multicast (depending on the device).



After you log in, the main window appears:

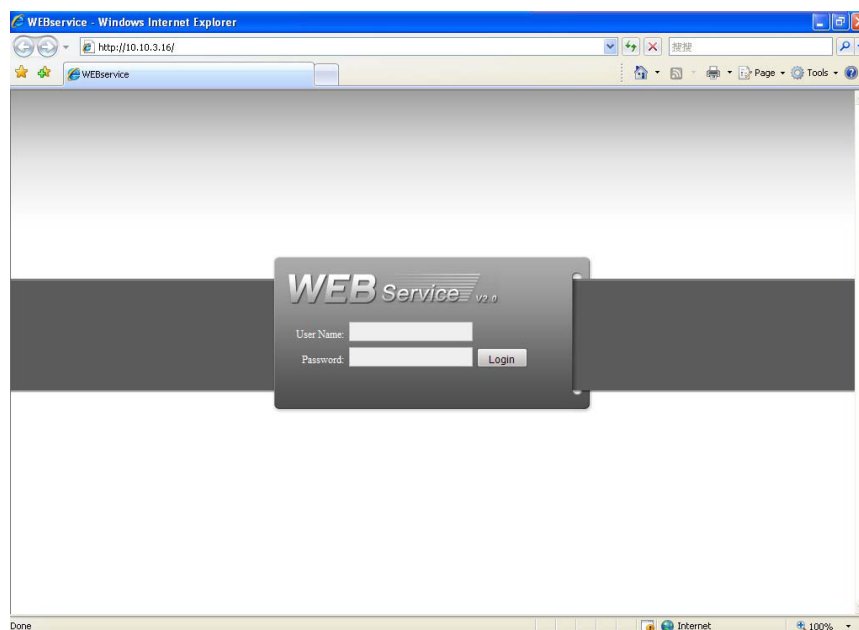


Note: Use IE compatibility mode if you are using IE8 or above.

See the detailed user guide for the Web interface.

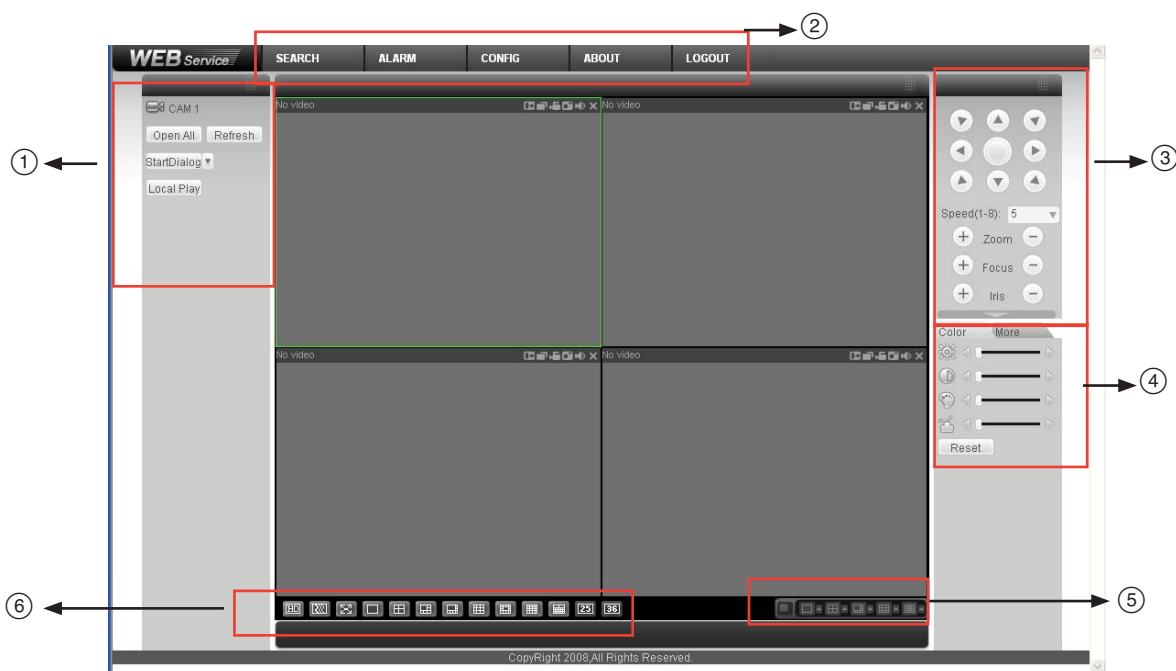
7 Main Interface Introduction

7.1 Log in



Input user name and password (default is admin/admin).

After you logged in, IP Camera web main interface appears:

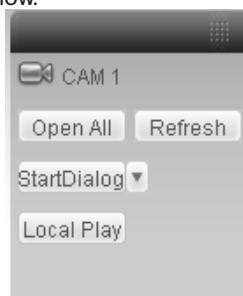


There are six sections:

- Section 1: Monitor channel menu tree.
- Section 2: System menu.
- Section 3: PTZ control.
- Section 4: Video setup and other setup.
- Section 5: Preview window.
- Section 6: Monitor window switch.

7.2 Monitor Channel Menu Tree

The monitor channel menu tree is shown below.

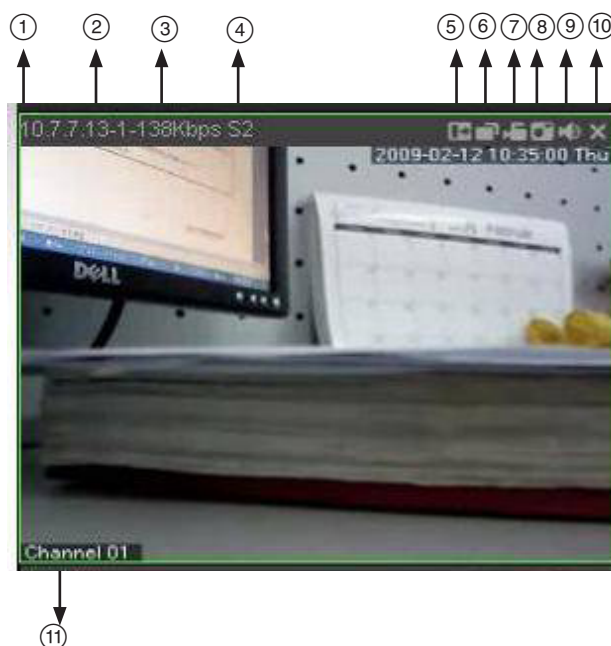


Refer to the following sheet for detailed information.

Parameter	Function
CAM 1	Monitor channel 1 IP Camera supports main stream and extra stream. - Main stream: In normal network width environment, main stream can record video and audio and realize network monitor. - Extra stream: If network width is not sufficient, you can use extra stream to realize network monitor. Note the extra stream resolution shall be less than main stream resolution.
Open all /Close all	Click this button to open all video channels. Once all video channels are open, this button becomes "Close all".
Start dialog	Click this button to enable audio talk. Audio compression type: G.711a (default), PCM, etc.
Local play	Click this button to select recorded file into the local PC to play it in the web interface.
Refresh	Click this button to refresh monitor channel name.

7.2.1 Live Monitoring

Left click on camera name to view real-time video, the monitor is show below.



Refer to the following sheet for monitor window parameter information.

SN	Parameter	Function
1-4	Display device information	- 1: Device IP address. - 2: Channel number. - 3: Bit stream. - 4: Stream decode type. - S1: Overlay. - S2: Off stream. - S3:GD1 - H1: Overlay - H2: off stream decoding from the display card.
5	Digital zoom	Click this button and then left drag the mouse in the zone to zoom in. Right click mouse system restores original status.
6	Change show mode	Resize or switch to full screen mode.
7	Local record	Click this button to begin local recording. The recorded file is saved by default to folder: C:\RecordDownload.
8	Capture picture	Click this button to snapshot. Images are memorized in folder: C:\ Picture download (default).
9	Audio	Turn on or off audio.
10	Close video	Close video in current window.
11	Channel number	Current view channel number.

7.2.2 Playback

Click local play to open recorder. The playback bar is shown below:



- 1- Playback process control
- 2- Play
- 3- Pause
- 4- Stop
- 5- Slow play
- 6- Fast play

Once you selected window is in real-time monitor mode, system automatically switches to playback the video by default.

7.3 System Menu

SEARCH	ALARM	CONFIG	ABOUT	LOGOUT
--------	-------	--------	-------	--------

For detailed information refer to:

- Chapter 8 : Configuration,
- Chapter 9 : Search,
- Chapter 10 : Alarm,
- Chapter 11: About,
- Chapter 12 : Log out.

7.4 Monitor Window Switch



The device support only 1-window and full-screen display mode.



Video quality adjustment button.



Displays the original image size in the webpage.

7.5 Preview Window Switch

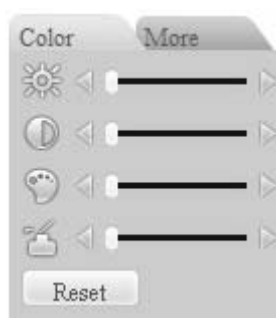
The device do not support this function.

7.6 PTZ Control

The device do not support PTZ control function.

7.7 Color and More Setup

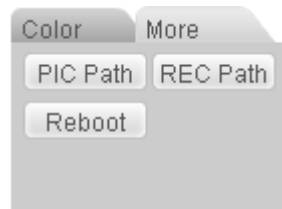
Color setup



Refer to the following sheet for detailed information.

Parameter		Function	
Video setup		Adjust monitor video brightness.	All the operations here apply to web display only. Go to chapter 8.2.2 System configuration->Encode setup->color setting to adjust corresponding system items.
		Adjust monitor video contrast ness.	
		Adjust monitor video saturation.	
		Adjust monitor video hue.	

More Setup



Refer to the following sheet for detailed information.

Parameter		Function
More	Picture Path	System pops up an interface to modify path.
	Record Path	System pops up an interface to modify path.
	Reboot	System pops up a dialogue box, click OK button to reboot device.

8 Configure

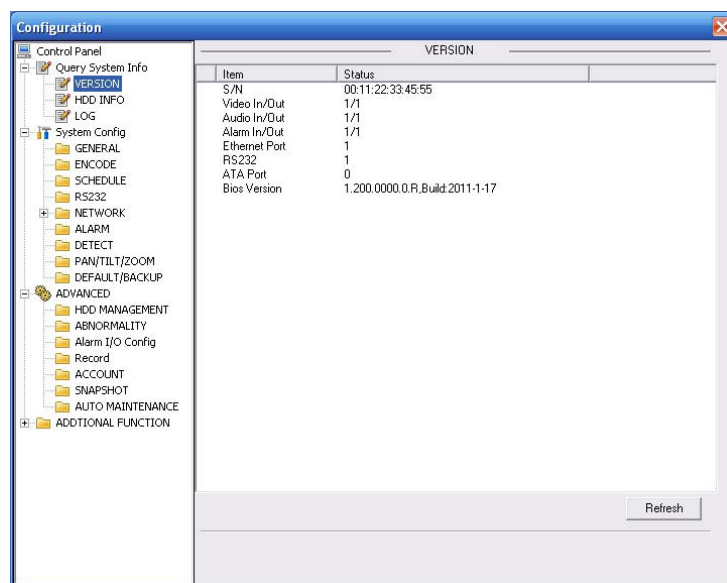
See chapter 7.3 to see how to access to the configuration menu».



8.1 System Information

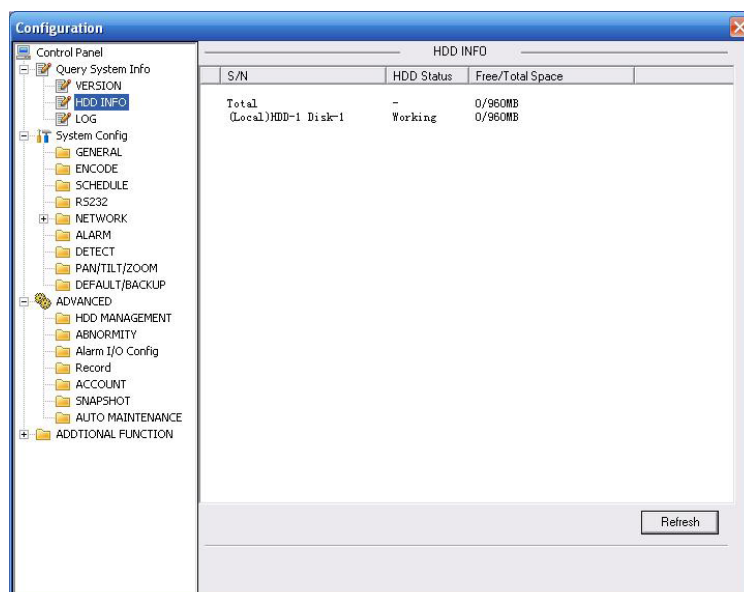
8.1.1 Version Information

View device hardware feature and software version information.



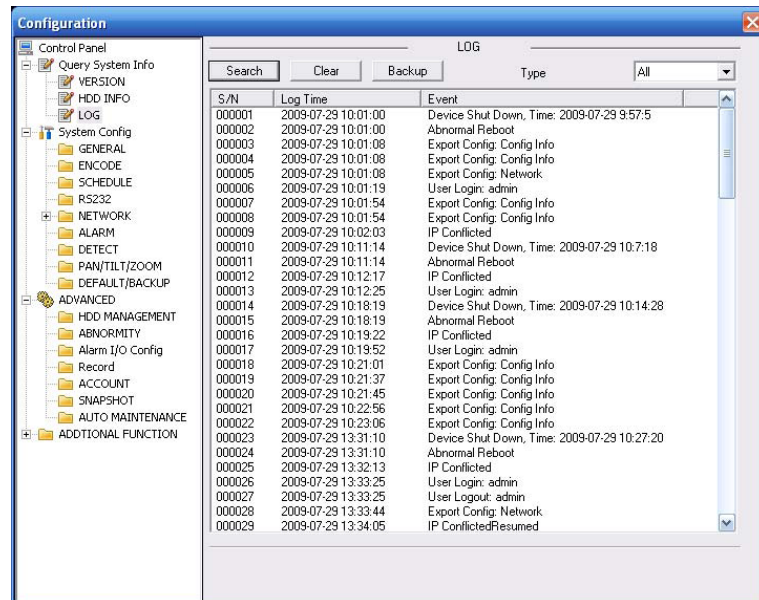
8.1.2 HDD information

View local storage status and network status including free capacity and total capacity.



8.1.3 Log

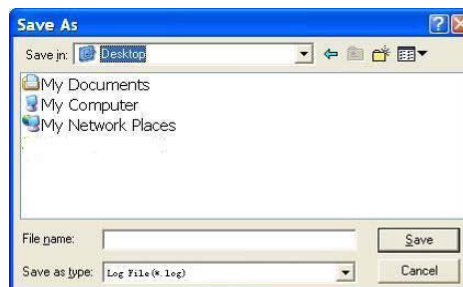
View system log.



Refer to the following sheet for log parameter information.

Parameter	Function
Type	Log types include: system operation, configuration operation, data management, alarm event, record operation, user management, log clear and file operation.
Search	Select log type from the drop down list and then click search button to view the list.
Clear	Click this button to delete all displayed log files. System does not support clear by type.
Backup	Click this button to backup log files.

To export logs, click backup button, the following interface appears:

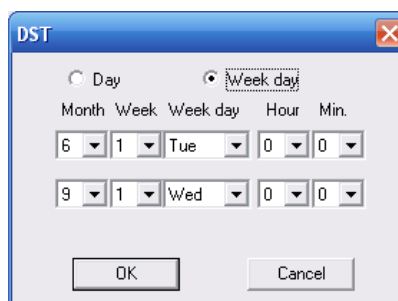
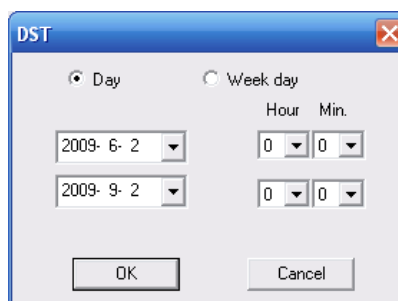
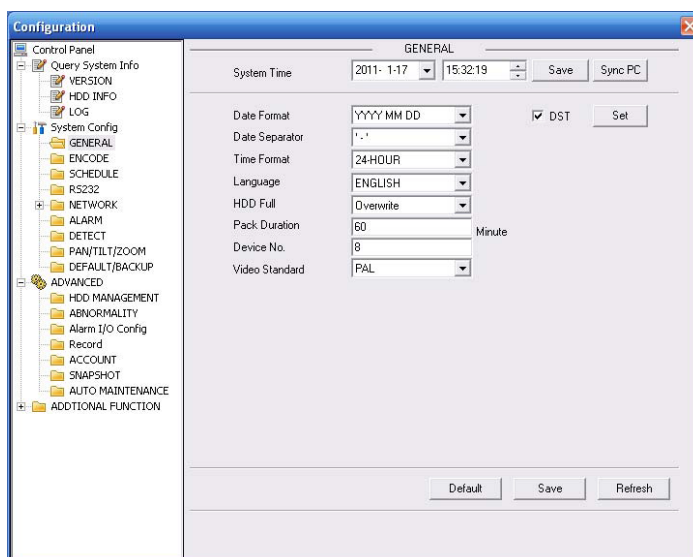


8.2 System Configuration

Please click save button to save your setup before exiting each section.

8.2.1 General Setup

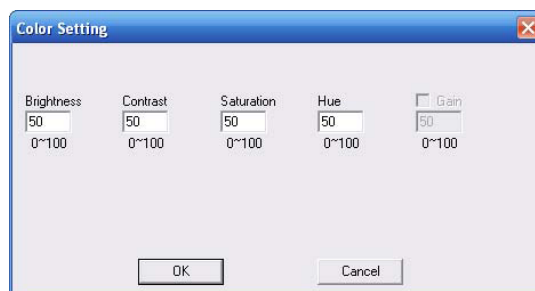
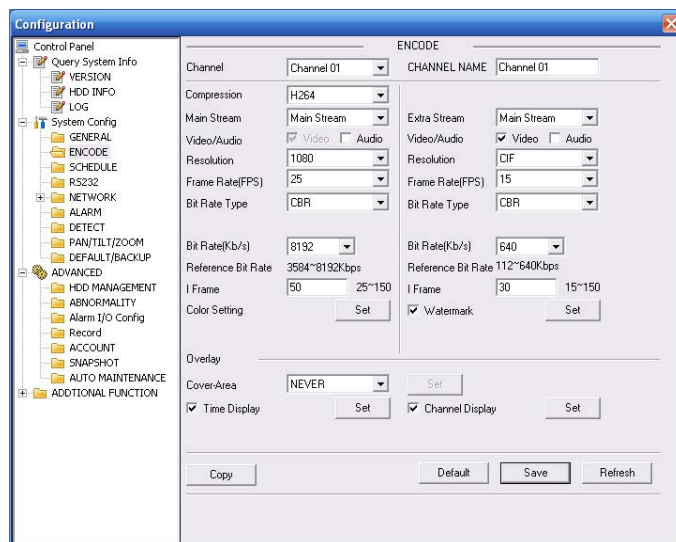
Set system time, record length, video format, etc.



Refer to the following sheet for detailed information.

Parameter	Function
System Time	Modify system time. Click "Save" button after your completed modification
Sync PC	Click this button to save the system time as your PC current time
Data Format	Select data format from the dropdown list.
Data Separator	Select separator such as – or /.
Time Format	Two options: 24-H and 12-H.
DST	Set day night save time begin time and end time.
Language	Select the language from the dropdown list. Device needs to reboot to get the modification activated.
HDD Full	Two options: stop recording or overwrite the previous files when HDD is full.
Pack Duration	Select recorded file size.
Device No	When you are using one remote control to manage multiple devices, you can give a serial numbers to the devices. This device does not support this function.
Video Standard	Display video standard such as PAL.

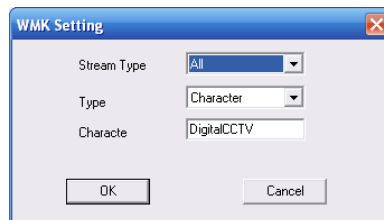
8.2.2 Encode



Refer to the following sheet for detailed information.

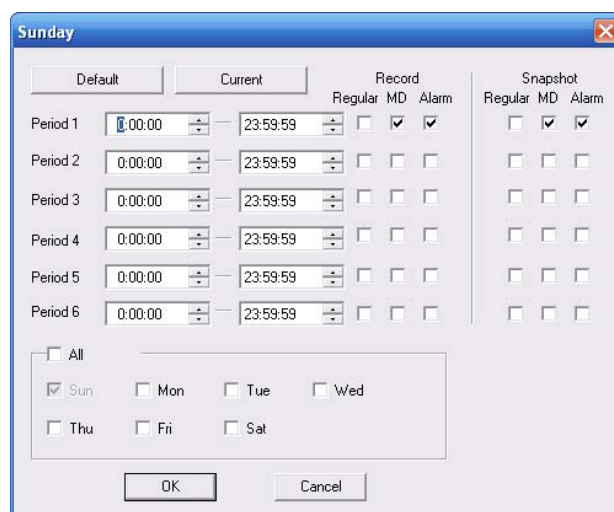
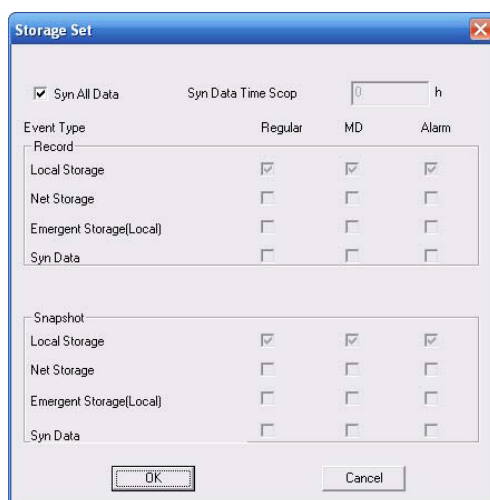
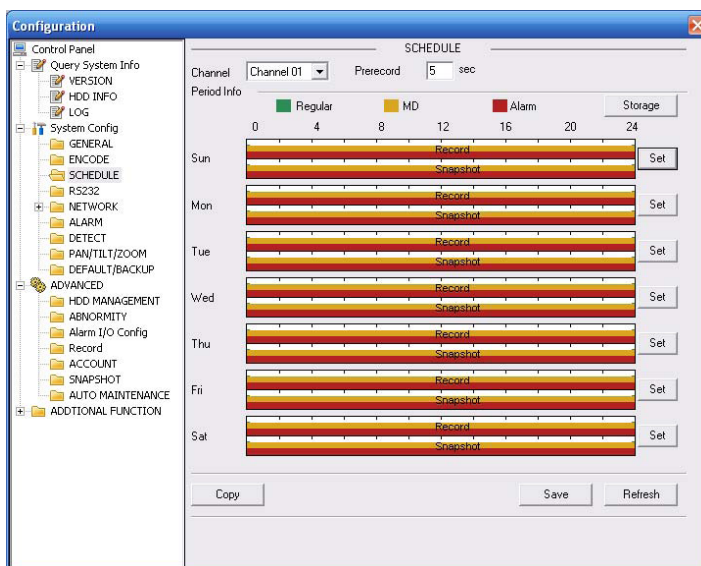
Parameter	Function
Channel	Select a monitor channel.
Channel Name	Display current channel name. You can modify it .
Compression	H.264
Main Stream	It includes general stream, motion stream and alarm stream. Select different encode frame rates form different recorded events. For example, use high frame rate to record important events, record scheduled event in lower frame rate and set different frame rates for motion detection record and alarm record.
Extra Stream	Select extra stream to enable the extension stream to monitor.
Audio/Video	Main stream: Recorded file only contains video by default. Check the audio box here to enable audio function. Extra stream: Recorded file only contains video by default. Check the audio box here to enable audio function.
Resolution	There are multiple resolutions. Select from the dropdown list. For each resolution, the recommended bit stream value is different.
Frame Rate	The frame rate may vary due to different resolutions. When the resolution type is 3M, 1-15f/s. For other resolutions 1-25f/s.
Bit Rate Type	There are two options: VBR and CBR.
Quality	The value ranges from 1 to 6. The level 6 is the best video quality. This setting is available only with VBR bit rate
Bit Rate	In CBR, the bit rate here is the max value. In dynamic video, system needs to low frame rate or video quality to guarantee the value. The value is null in VBR mode. Refer to recommend bit rate for the detailed information. .
Recommended Bit	Recommended bit rate value according to the resolution and frame rate set.
I Frame	Set the P frame amount between two I frames. The value ranges from 1 to 150. Default value is 50. Recommended value is frame rate *2.
Color Setting	Set video brightness, contrast, hue, saturation and gain. The value ranges from 0 to 100.
Watermark	Select watermark bit stream, watermark mode and watermark character. Default character is Digital CCTV.
Cover area (privacy mask)	Set privacy masks. System max supports 8 privacy mask zones.
Time Title	Enable this function to overlay time information in video window. OSD transparent value ranges from 0 to 255. 0 means complete transparent. Use the mouse to drag the time tile position.
Channel Title	You can enable this function to overlay channel information in video window. OSD transparent value ranges from 0 to 255. 0 means complete transparent. Use the mouse to drag the channel tile position.
Save	Click save button after complete setup for one item, or complete the whole setups and then click save button.
Refresh	Click this button to get device latest configuration information.

Click watermark button to open interface as below:



8.2.3 Schedule

Set differents periods for various days. There are max six periods in one day.

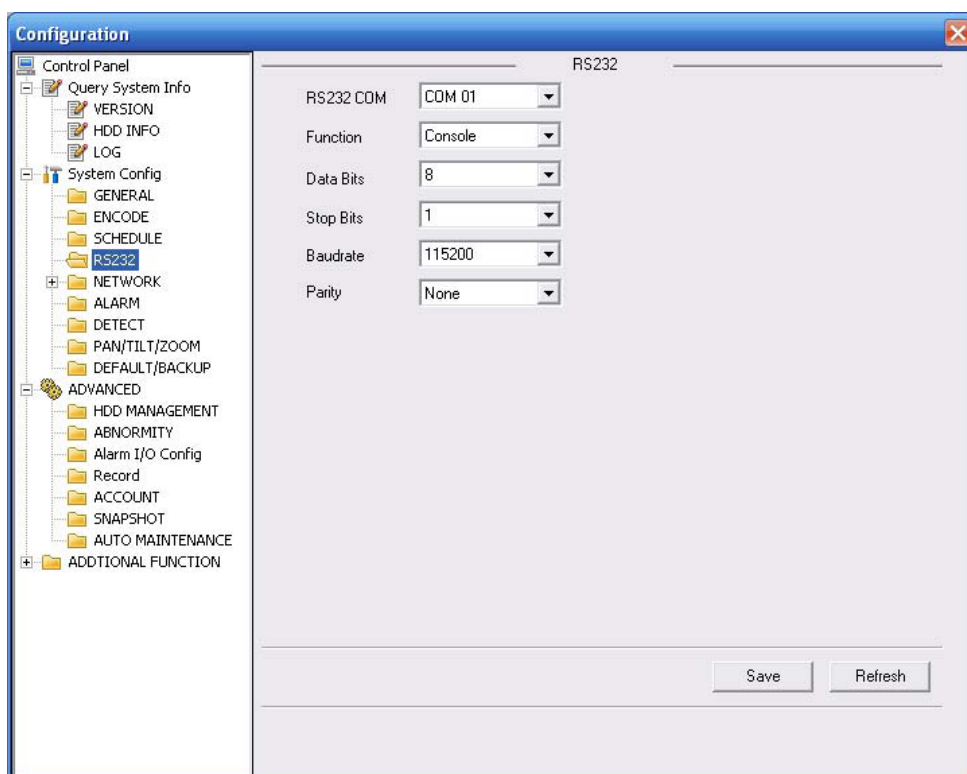


Refer to the following sheet for detailed information.

Parameter	Function
Channel	Select a channel first.
Pre-record	Input pre-record value here. System can record the three to five seconds video before activating the record operation into the file. (Depends on data size).
Storage	System support record/snapshot file local storage mode only.
Setup	- Click set button, to go to the corresponding setup interface. - Set schedule period and select corresponding record or snapshot type: motion detection/snapshot, and alarm/snapshot. System does not support schedule/snapshot function, - Select date (Current setup applies to current day by default. Select all to apply the setup to the whole week.) - After complete setup, go back and click save to save current time period setup.
Save	Click save button after complete setup for one channel, or complete the whole setup and click save button.
Refresh	Click this button to get device latest configuration information.

Note : System does not support regular recording on SD card.

8.2.4 RS232



Refer to the following sheet for detailed information

Parameter	Function
RS232	There is only one option COM 01, corresponding to RS232
Function	Console is for debug.
	Control keyboard: Switch between RS232 and control keyboard.
	Network keyboard: COM control protocol. You can use network keyboard to control IPC via COM.
	Transparent COM: Network user can communicate with RS232 COM device.
	Alarm box: not used.
	COM_GPS: not used.
	COM_RADAR: not used.
Data Bit	The value ranges from 5 to 8.
Stop Bit	There are two options: 1/2.
Baud Bit	You can select corresponding baud bit here.
Parity	There are five options: none/odd /even/mark/space.

8.2.5 Network

Network interface

Configuration

Control Panel

- Query System Info
 - VERSION
 - HDD INFO
 - LOG
- System Config
 - GENERAL
 - ENCODE
 - SCHEDULE
 - RS232
 - NETWORK**
 - EMAIL
 - DDNS
 - NAS
 - NTP
 - IP-FILTER
 - ALARM
 - DETECT
 - PAN/TILT/ZOOM
 - DEFAULT/BACKUP
- ADVANCED
 - HDD MANAGEMENT
 - ABNORMALITY
 - Alarm I/O Config
 - Record
 - ACCOUNT
 - SNAPSHOT
 - AUTO MAINTENANCE
- ADDITIONAL FUNCTION

NETWORK

Ethernet Port: Port 01 ☐ DHCP

IP Address: 10 . 12 . 5 . 28 Mac Address: 00:11:22:33:45:55

Subnet Mask: 255 . 255 . 0 . 0

Gateway: 10 . 12 . 0 . 1

Device Name: 00-11-22-44-55

TCP Port: 37777 HTTP Port: 80

UDP Port: 37778 Max Connection: 4

Preferred DNS: 202 . 101 . 172 . 35

Alternate DNS: 202 . 101 . 172 . 35

☐ Transfer: Latency

Service Type: MULTICAST

User Name: IP Address: 239 . 255 . 42 . 42

Password: Port: 36666 1~65535

Default Save Refresh

Refer to the following sheet for detailed information

Parameter	Function
Ethernet	Select the network card first. Port 1 is the ethernet port. Port 2 is the wireless port (if available).
DHCP	Dynamically get IP address. Get the device IP address from the server if this function is enabled.
Device Name	Device ID in the network.
TCP Port	Default value is 37777.
HTTP Port	Default value is 80.
UDP Port	Default value is 37778.
DNS	Manually set IP address of DNS.
Alternative DNS	You need to enable this function if you are inputting the domain name in some items. Otherwise the system can not parse the domain name.
Max Connection	Simultaneously, network users max amount. The value ranges from 1 to 10.
Network transmission QoS	Set the priority between fluency and video quality or self-adaptive. System can automatically adjust the bit stream or lower the resolution according to the network bandwidth.

Advance interface

The screenshot shows a configuration interface with the following fields:

- Service Type: A dropdown menu set to "MULTICAST".
- User Name: An empty text input field.
- Password: An empty text input field.
- IP Address: A text input field containing "239 . 255 . 42 . 42".
- Port: A text input field containing "36666".

Parameter		Function
Remote Host	Multiple cast group	- Set MULTICAST address and port. - Enable function. - Current series IPC does not support this function right now.
	PPPOE	- Input the PPPoE user name and password you get from the IPS (internet service provider) and enable PPPoE function. Save current setup and reboot the device to get the setup activated. - Device connects to the internet via PPPoE after reboot. Get the IP address in the WAN from the IP address column.

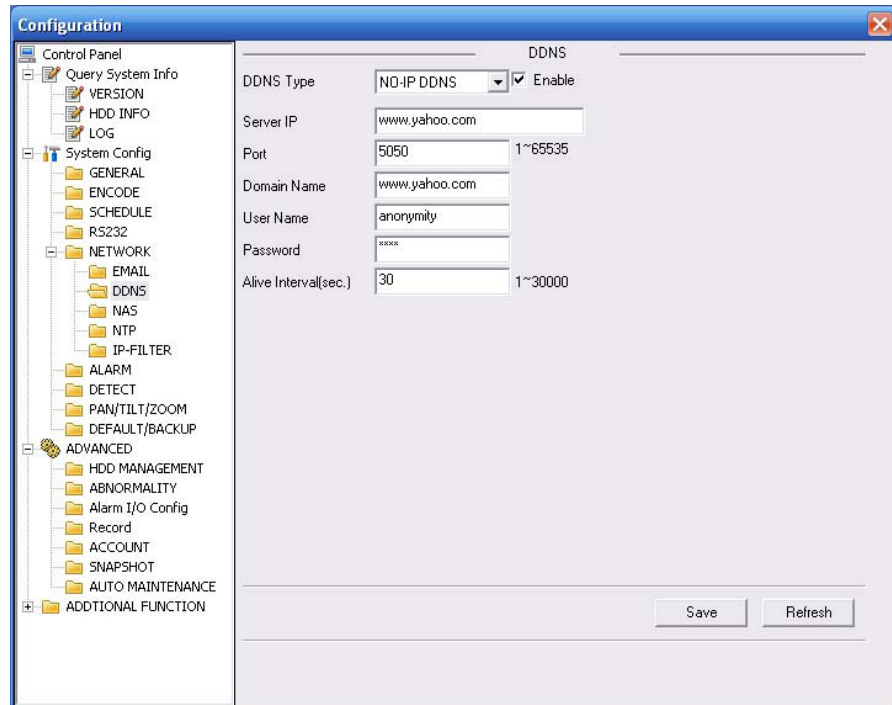
Email Interface

The screenshot shows a 'Configuration' window with a tree view on the left and a settings panel on the right. The tree view includes 'Control Panel', 'Query System Info', 'VERSION', 'HDD INFO', 'LOG', 'System Config', 'GENERAL', 'ENCODE', 'SCHEDULE', 'RS232', 'NETWORK', 'EMAIL', 'DDNS', 'NAS', 'NTP', 'IP-FILTER', 'ALARM', 'DETECT', 'PAN/TILT/ZOOM', 'DEFAULT/BACKUP', 'ADVANCED', 'HDD MANAGEMENT', 'ABNORMALITY', 'Alarm I/O Config', 'Record', 'ACCOUNT', 'SNAPSHOT', 'AUTO MAINTENANCE', and 'ADDITIONAL FUNCTION'. The 'EMAIL' option is selected. The settings panel on the right is titled 'EMAIL' and contains the following fields: 'SMTP Server' (www.Yahoo.com), 'Port' (25), 'User Name' (anonymity), 'Password' (xxxx), 'Sender' (anonymity@yahoo.com), 'Subject' (DVR Message), 'Receiver 1', 'Receiver 2', and 'Receiver 3'. There is an 'Enable' checkbox which is checked. At the bottom right of the settings panel are 'Save' and 'Refresh' buttons.

Please refer to the following sheet for detailed information.

Parameter	Function
SMTP Server	Input server address and then enable this function.
Port	Default value is 25. Modify it if necessary.
User Name	Sender email account user name.
Password	Sender email account password.
Sender	Sender email address.
Subject	Input email subject here.
Address	Input receiver email address here. Max three addresses.

DDNS interface



Refer to the Annex 1 for NO-IP DDNS setup information.
Refer to the following sheet for detailed information.

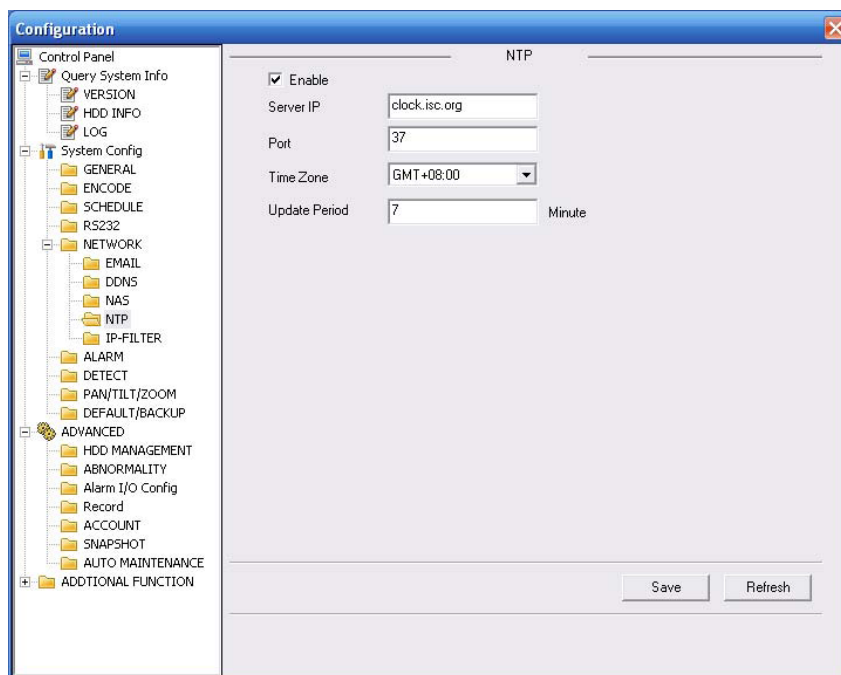
Parameter	Function
Server Type	Select DDNS protocol from the dropdown list and then enable DDNS function. The private DDNS protocol means you use your self-defined private protocol to realize DDNS function.
Server IP	DDNS server IP address.
Server Port	DDNS server port.
Domain Name	Self-defined domain name.
User	User name you input to log in the server.
Password	Password you input to log in the server.
Interval	Device sends out alive signal to the server regularly. Set interval value between the device and DDNS server here.

NAS interface

This device does not support this function.

NTP interface

Realize network time synchronization. Enable current function and input server IP, port number, time zone and time.

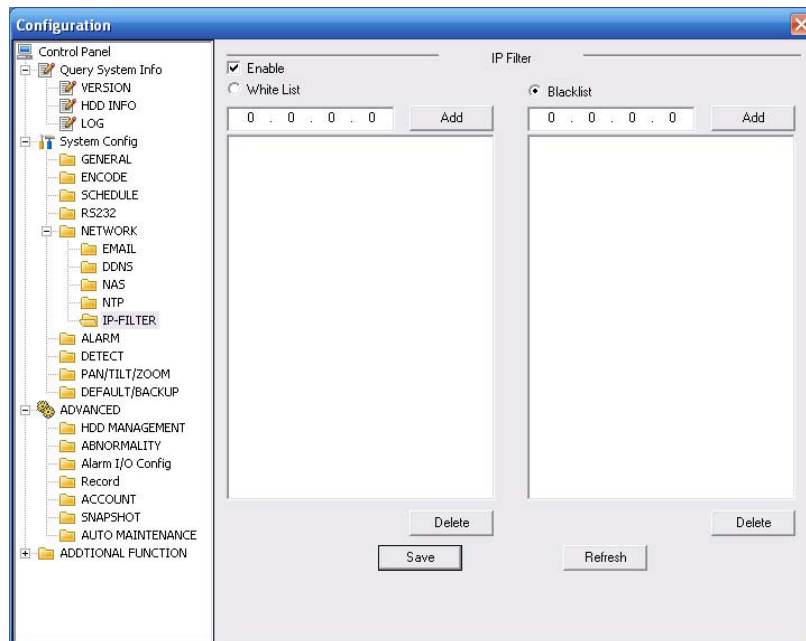


Refer to the following sheet for detail information.

Parameter	Function
Enable	Enable NTP function or not.
Server IP	Server IP address
Port	Server port.
Time Zone	Device current time zone.
Update Interval	Time update interval value.

IP Filter interface

Enable IP filter function so that some specified IP user can or not access the device.
You can not set white list and black list function at the same time.



8.2.6 Alarm

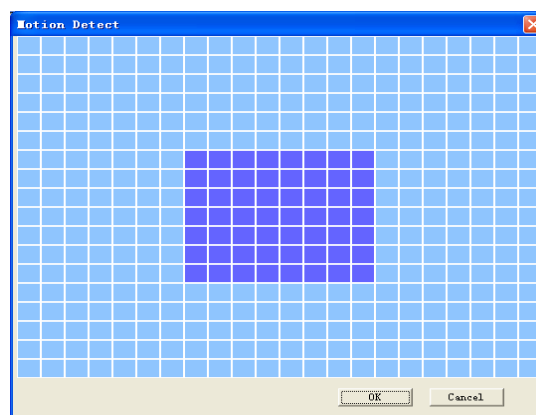
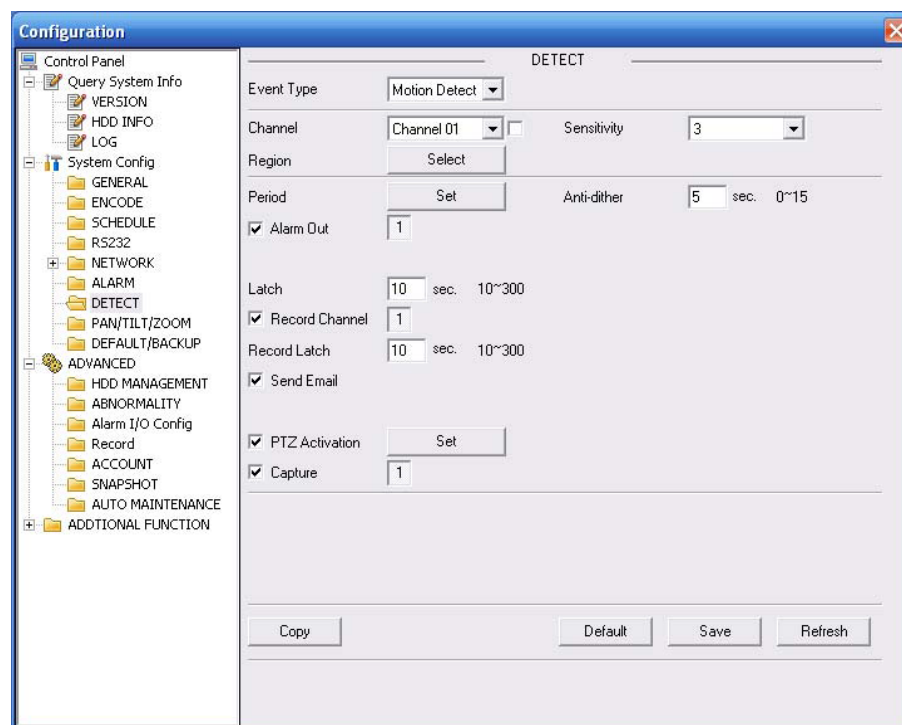
The screenshot shows a 'Configuration' window with a tree view on the left and a settings panel on the right. The tree view includes 'Control Panel', 'Query System Info' (with sub-items VERSION, HDD INFO, LOG), 'System Config' (with sub-items GENERAL, ENCODE, SCHEDULE, RS232, NETWORK, ALARM, DETECT, PAN/TILT/ZOOM, DEFAULT/BACKUP), 'ADVANCED' (with sub-items HDD MANAGEMENT, ABNORMALITY, Alarm I/O Config, Record, ACCOUNT, SNAPSHOT, AUTO MAINTENANCE), and 'ADDITIONAL FUNCTION'. The 'ALARM' settings panel is titled 'ALARM' and contains the following fields:

- Event Type: Local Alarm (dropdown)
- Alarm In: Input 01 (dropdown) with a checked checkbox
- Type: Normal Close (dropdown)
- Period: Set (button)
- Anti-dither: 0 sec. 0~15 (text input)
- Alarm Out: 1 (text input) with a checked checkbox
- Latch: 10 sec. 10~300 (text input)
- Record Channel: 1 (text input) with a checked checkbox
- Record Latch: 10 sec. 10~300 (text input)
- Send Email: checked checkbox
- PTZ Activation: Set (button)
- Capture: 1 (text input) with an unchecked checkbox

At the bottom of the settings panel are four buttons: Copy, Default, Save, and Refresh.

Parameter	Function
Event Type	It includes local alarm/network alarm. - Local alarm: Device detects alarm from input port. - Network: Device detects alarm from network.
Alarm in	Select corresponding alarm channel.
Enable	Check to enable the alarm function.
Type	There are two options: normal open and normal close. NO becomes activated in low voltage, NC becomes activated in high voltage..
Period	- Alarm record function becomes activated in the specified periods. - There are six periods in one day. Enable corresponding period. - Select date or whole week. - Click OK button, system goes back to alarm setup interface, please click save button to exit.
Anti-dither	System only memoryze one alarm during the period set here (0 to 600 s)
Normal Out	Select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm Latch	System delay the alarm output for specified time after alarm end (from 10 seconds to 300 seconds).
Record Channel	System auto activates current channel to record once alarm occurs (working with alarm activation function). Note current device shall be in auto record mode (Chapter 8.2.3 Schedule).
Record Latch	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Email	Check to enable email function. System can send email when alarm occurs and ends.
Tour	This function is not available in current device.
PTZ activation	The system can go to a preset when alarm occurs (only for IP speed dome).
Capture	Input capture channel number so that system can backusnapshot file to the SD card or send to the specified email box when alarm occurs.
Copy	It is a shortcut menu button. You can copy current channel setup to one or more (all) channels.
Save	You can click save button after you complete setup for one channel, or you can complete the whole setups and then click save button.
Refresh	Click this button to get device latest configuration information.

8.2.7 Detect



The dark blue squares correspond to a zone with active detection.

Refer to the following sheet for detailed information.

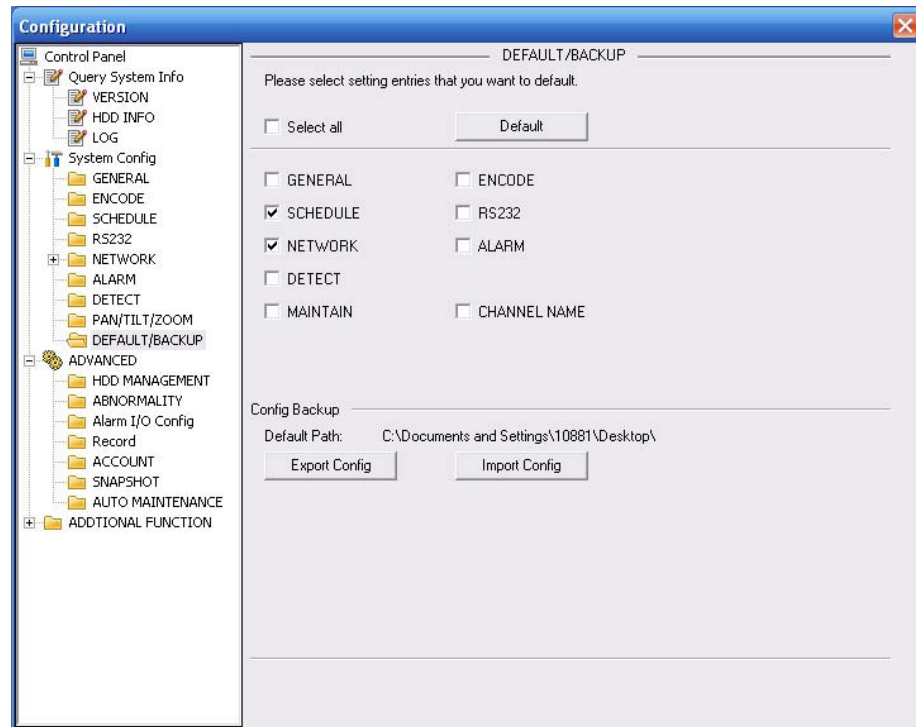
Parameter	Function
Event Type	There are three types: Motion detection/Video loss/Camera Masking.
Channel	Select channel name from the dropdown list.
Enable	Check to enable motion detection function.
Sensitivity	There are six levels. The level 6 has the highest sensitivity.
Region	- Region: after you select motion detection type, click this button to set motion detection zone. There are PAL 22X18/NTSC 22X15 zones. Double right click mouse you can go to full-screen display mode. Remember clicking OK button to save your motion detection zone setup.
Period	- Motion detection function becomes activated in the specified periods. - There are six periods in one day. Enable corresponding period. - Select date or whole week. - Click OK button, system goes back to motion detection interface. Click save button to exit.
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 0s to 15s..
Normal out	- There is 1-channel alarm output. - Corresponding to motion detection alarm output port. - Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs..
Alarm Latch	System can delay the alarm output for specified time after alarm end. The value ranges from 10 seconds to 300 seconds.
Record Channel	System auto activates motion detection channel to record once alarm occurs (works with motion detection function). Note you need to go to chapter 8.2.3 Schedule to set motion detection record period and go to chapter 8.3.3 Record to set current period as auto record.
Record Latch	System can delay the record for specified time after alarm ended. The value ranges from 10 seconds to 300 seconds..
Email	Send email when alarm occurs and ends.
PTZ activation	Set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm.
Capture	Input capture channel number so that system can backup motion detection snapshot file.
Save	Click save button after complete setup for one channel, or complete the whole setups and click save button.
Refresh	Click this button to get device latest configuration information.

8.2.8 Default & Backup

Default: Restore factory default setup. Select corresponding items.

Backup: Export current configuration to local PC or import configuration from current PC.

System can't restore some information such as network IP address.



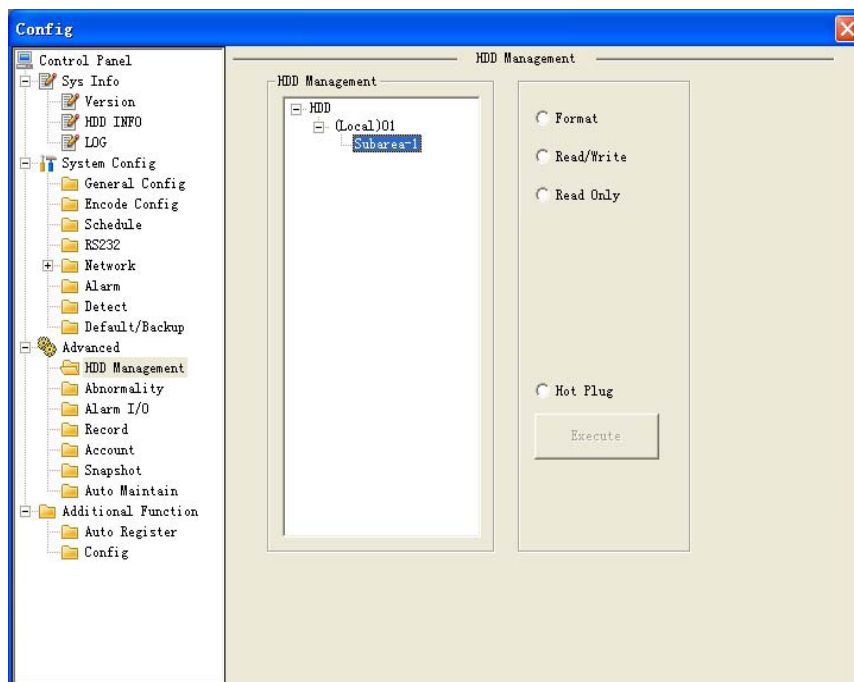
Refer to the following sheet for detailed information.

Parameter	Function
Select All	Restore factory default setup.
Export Configuration	Export system configuration to local PC.
Import Configuration	Import configuration from PC to the system.

8.3 Advanced

8.3.1 HDD Management

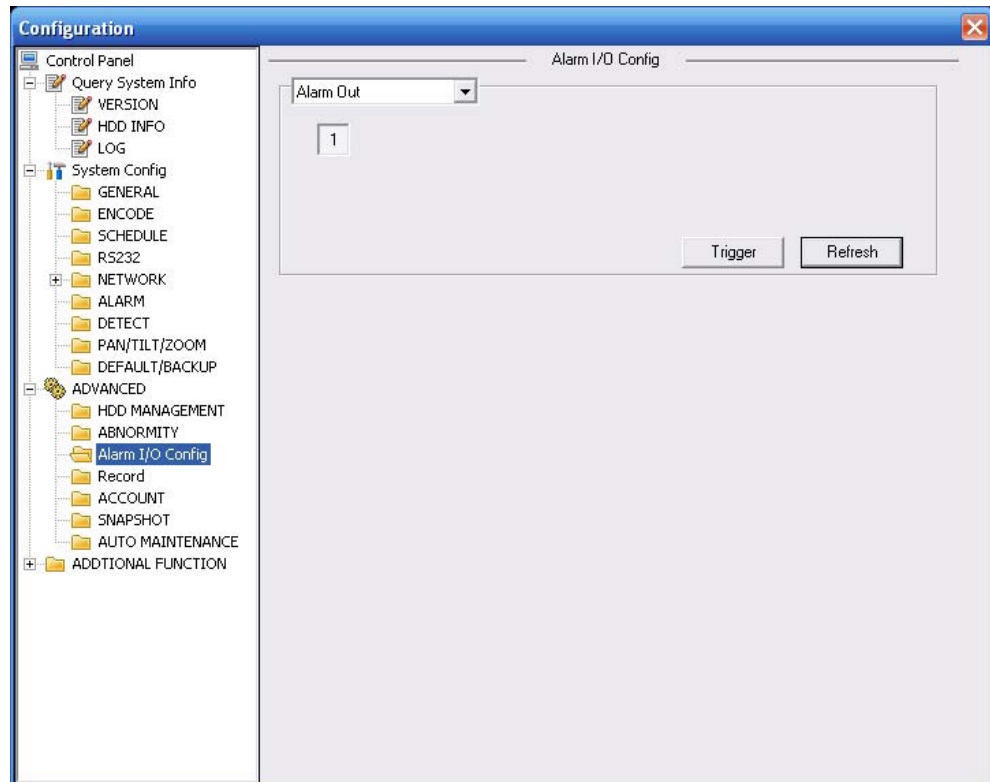
HDD management includes net storage management and local storage management. Select the storage device first and then the items on your right become valid. Check the corresponding item here. Click the Execute the button; system needs to reboot to activate current setup.



Refer to the following sheet for detailed information.

Parameter	Function
Format	Clear data in the disk
Read/write	Set current disk as read/write
Read only	Set current disk as read.
Hot swap	This function allows to hot swap the disk when the device is working. This function will not result in disk malfunction.
Execute	Click this button to save disk current status.

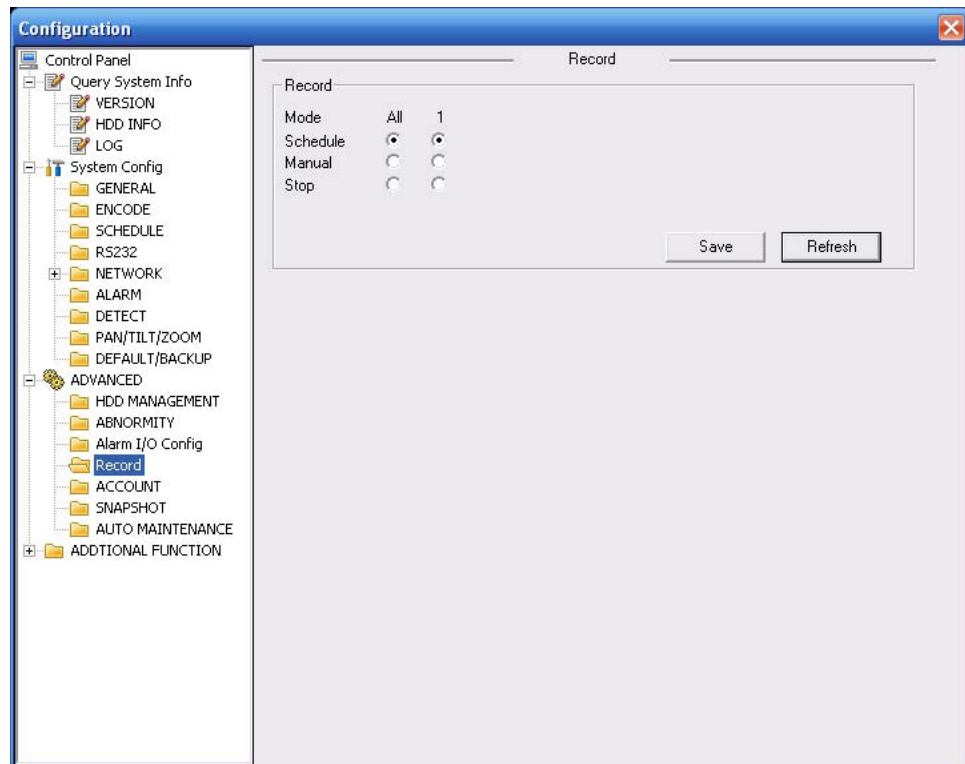
8.3.2 Alarm I/O



Refer to the following sheet for detailed information.

Parameter	Function
Alarm output	There is only one output channel. Please click the button 1.
Trigger	Enable/disable alarm output device.
Refresh	Search alarm output status.

8.3.3 Record

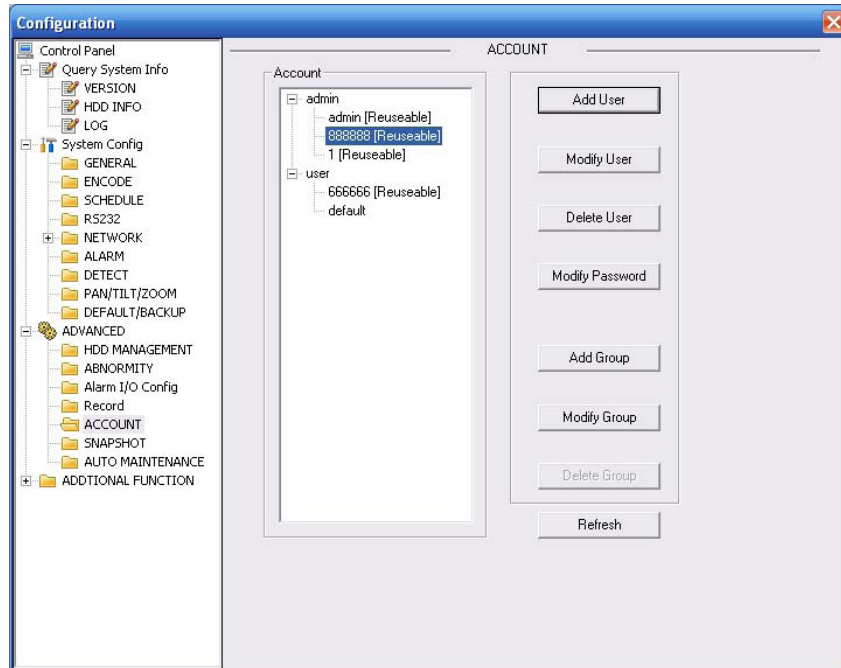


Refer to the following sheet for detailed information.

Parameter	Function
Auto	System enables auto record function as set in record schedule setup.
Manual	Not available.
Stop	Stop current channel record, no matter what period applied in the record schedule setup.

8.3.4 Account

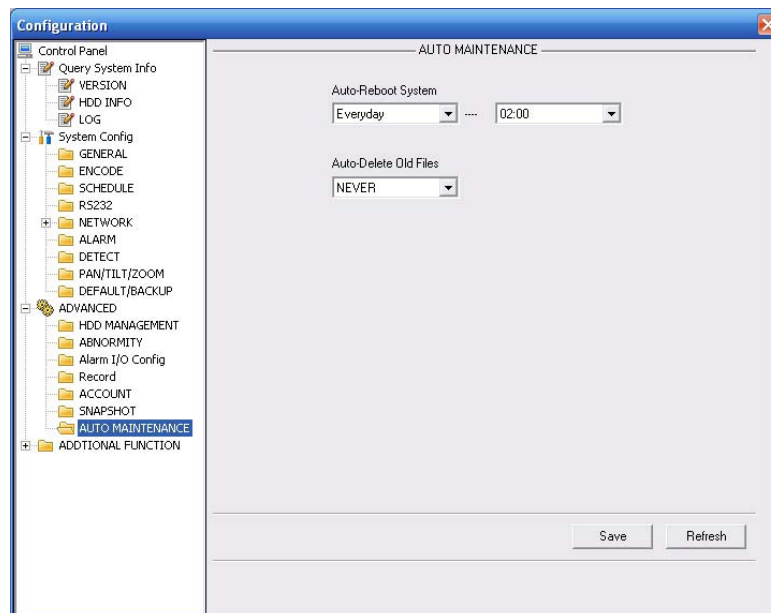
Add, remove user or modify password.



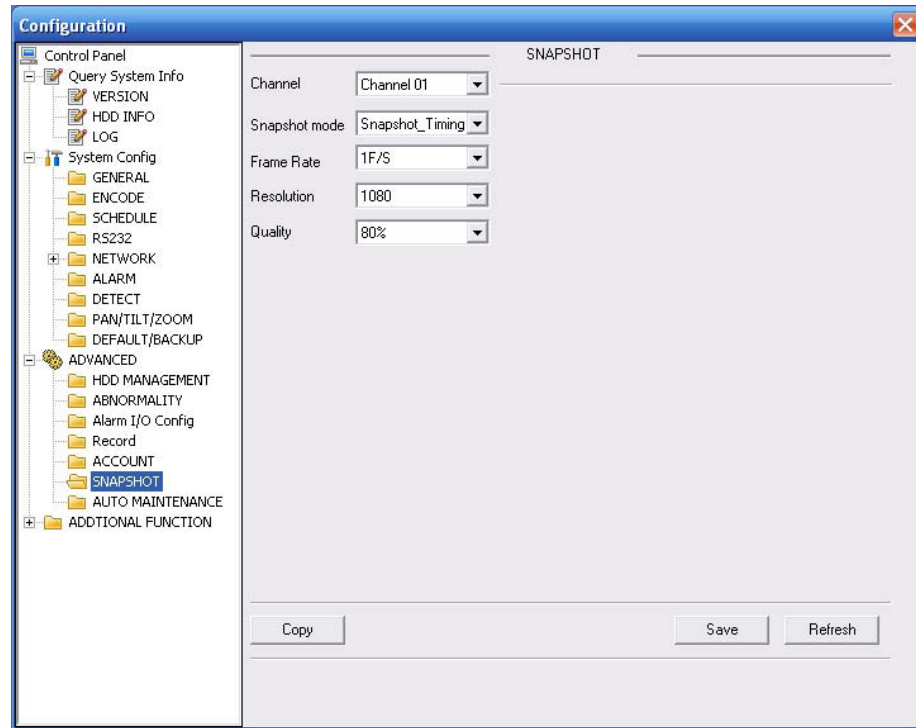
Note : Reusable means that the account can be use for different login at the same time.

8.3.5 Auto Maintenance

Select auto reboot and auto delete old files interval.



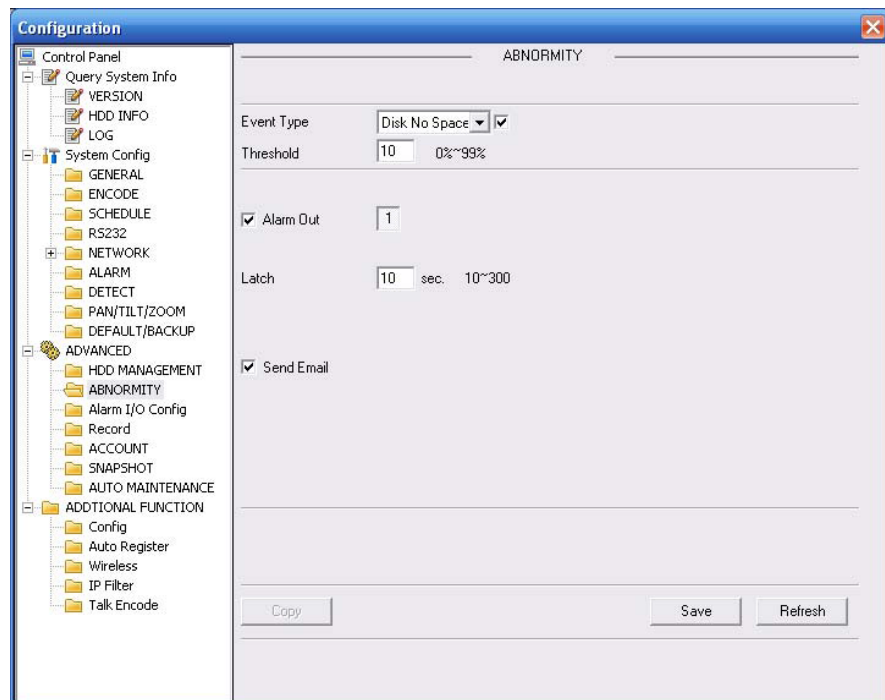
8.3.6 Snapshot



Refer to the following sheet for detailed information.

Parameter	Function
Channel	Monitor channel.
Snapshot mode	Two modes: Timing and activation.
Frame rate	Select from the dropdown list. The value ranges from 1f/s to 8f/s.
Resolution	Select from the dropdown list. The resolution may vary due to different series.
Quality	Select from the dropdown list. Here is for you to set video quality.

8.3.7 Abnormity



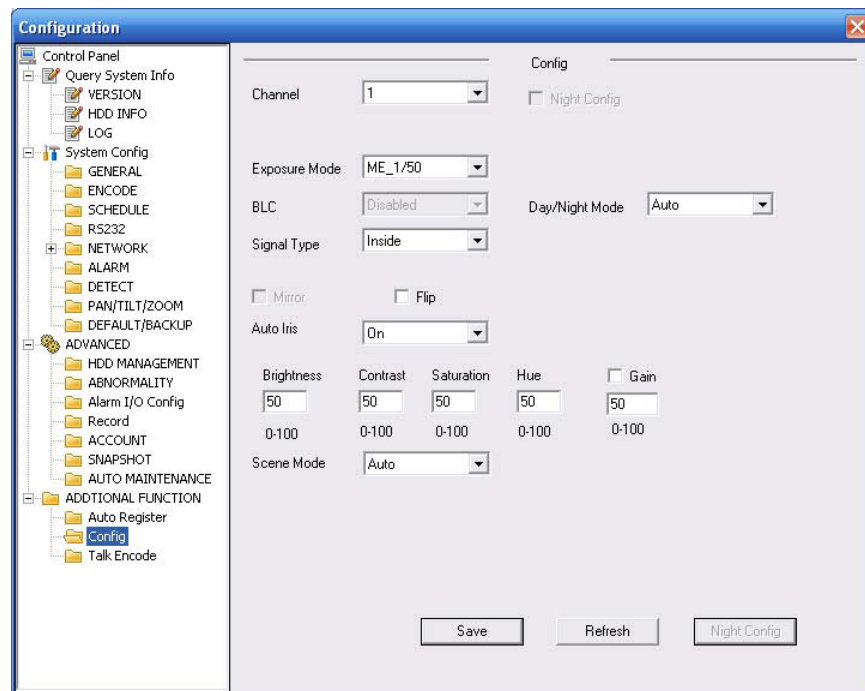
Refer to the following sheet for detailed information.

Parameter	Function
Event Type	- The abnormal events include: no disk, no space, disk error, net error, offline, IP conflict. - XXXX Space Alarm: Set the minimum percentage value here. The device can alarm when capacity is not sufficient. - Check enable this function.
Normal Out	Corresponding alarm output channel when alarm occurs, there is one channel.
Record channel	System auto activates channel to record once alarm occurs (for offline type only). Please note you need to go to chapter 8.3.3 record to set current period as auto record.
Latch	The alarm output can delay for the specified time after alarm stops. The value ranges from 10s to 300s
Send email	System send email to alarm the specified user. This function is invalid when network is offline or IP conflict occurs.

8.4 Additional Function

8.4.1 Configure

Set camera property parameter. The following interface may vary regarding different devices.



Refer to the following sheet for detailed information.

Parameter	Function
Channel	Monitor channel 1
Exposure Mode	There are two modes: Auto exposure (AE) and Manual exposure (ME). There are some ME time ranges from 1/50 to 1/10000. It supports customized setup too (may be different depending of the device).
Day/Night Mode	IPC day night mode switch. There are three options: color-off/color-on/auto (may be different depending of the device).
Signal Standard	Video input mode: internal input.
Flip	It is to switch video up and bottom.

8.4.2 Auto Register

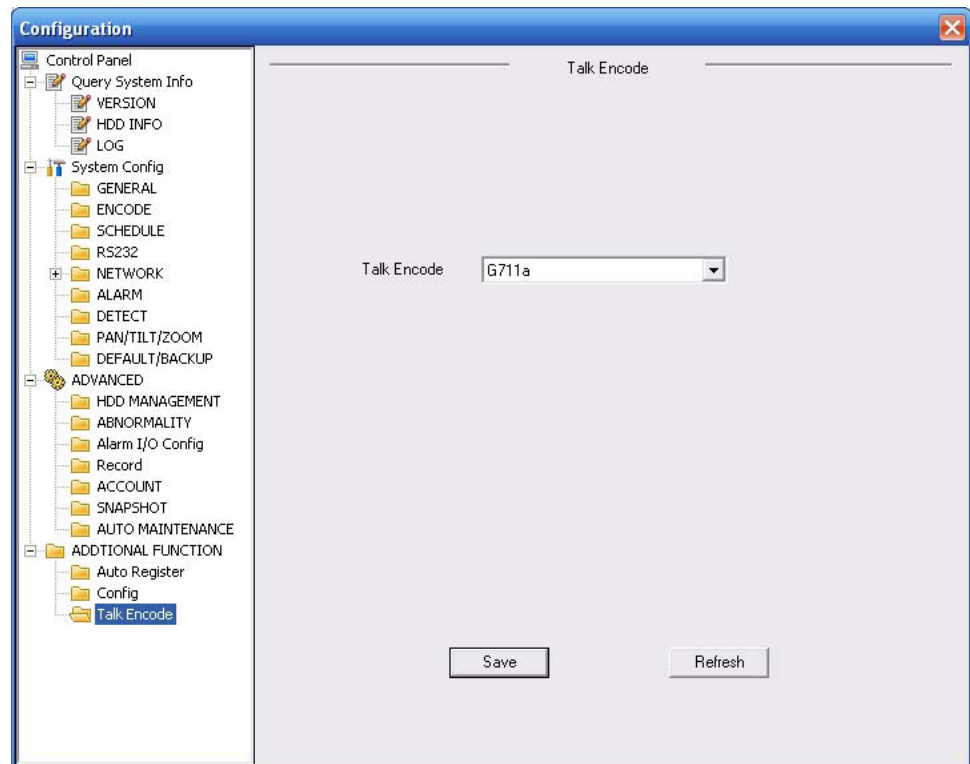
The screenshot shows a 'Configuration' window with a tree view on the left and a settings panel on the right. The tree view includes 'Control Panel', 'Query System Info', 'System Config', 'ADVANCED', and 'ADDITIONAL FUNCTION'. Under 'ADDITIONAL FUNCTION', 'Auto Register' is selected. The settings panel for 'Auto Register' includes a checked 'Enable' checkbox, a 'No.' dropdown set to '1', an 'IP' field set to '0.0.0.0', a 'Port' field set to '7000', and a 'Device ID' field containing 'Indoor'. 'Save' and 'Refresh' buttons are at the bottom.

Refer to the following sheet for detailed information.

Parameter	Function
Enable	Enable auto register function.
No.	Device management server number.
IP	Device management server IP address.
Port	Server port number.
Device ID	Device ID in the device management server.

8.4.3 Talk Encode

Set audio compression bit rate. It includes PCM, G711a, G711u.



9 Search

See chapter 7.3 to see how to access to the configuration menu».



Click search button, the following interface appears:

Search

Type: ☐ Record ☐ Alarm ☐ Motion ☒ Local ☐ Picture ☐ Card

Parameter: Begin Time: 2009- 8- 3 14:27:21 End Time: 2009- 8- 6 14:27:21 Channel: 1 Earliest Rec

Operation: Search Playback Download Type: File Download Open Local Record Watermark

S/N	File Size(KB)	File Name	File Path
☒ 1	9541	10.10.5.82_ch1_20090806_143711.dav	C:\RecordDownload\1

Download Speed: 0 k/s Page Down ☐ Emphasize All

Select record playback mode, and then select start time, end time and channel.
Click search button, the corresponding files in the list appears.

Select the file(s) to download and click download button, system pops up a dialogue box.
Specify file name and path to download the file(s) to PC.
Click Ok to complete the download procedure.

Refer to the following sheet for detailed information.

Type	Parameter	Function
Type	Record	Search general record, alarm record and motion detection record.
	Alarm	Search alarm record.
	Motion Detection	Search motion detection record.
	Local	Search local record.
	Picture	Search snapshot file.
	Card	This function is not available in current device.
Item	Start time	Set the file start time.
	End time	Set the file end time.
	Channel	Select the channel from the dropdown list.
Operation	Search	Click this button you can view the recorded file matched your requirements.
	Playback	Select the file first and then click playback button to view the video.

Type	Parameter	Function
	Download type	Download by file: Select the file(s) and then click download button. Download by time: Download the recorded file(s) during specified period.
	Download	Select the file needed (multiple choices) and click download button, system pops up a dialogue box. Input the downloaded file name, specify the path and then click OK button. System begins download and the download button becomes stop button. There is a progress bar.
	Open local record	Select local record to play.
	Watermark	Note : Go to chapter 8.2.2 Encode to enable watermark function first. Click watermark button.Default watermark character is DigitalCCTV. Click local file you can select the recorded file. Then click verify button to check file is original or not.
Multiple-channel playback		System supports playback one file in several monitor channels.

During the playback process, there are control buttons such as play, pause, stop. slow play and fast play in the play process bar.

10 Alarm

See chapter 7.3 to see how to access to the configuration menu».



Click alarm function, the following interface appears.
Set device alarm type and alarm sound setup. .

A screenshot of the 'Alarm' configuration window. It has a title bar with 'Alarm' and a close button. The window is divided into several sections. On the left, under 'Event Type', there are checkboxes for Video Loss, Motion Detect, Disk Full, Disk Error, Video Mask, Encoder Alarm, and External Alarm, all of which are checked. On the right, under 'Operation(External Alarm can not open video)', there are checkboxes for Listen Alarm, Video Pop-up, and Prompt, all checked. Below this is the 'Alarm Sound' section, which has a checked checkbox for 'Sound Pop-up' and a 'Sound Path' text field with a '>>' button. At the bottom of the window is a table with five columns: Time, Device ID, Event Type, Alarm Port/Channel, and an empty column. The table is currently empty of data rows.

Refer to the following sheet for detailed information.

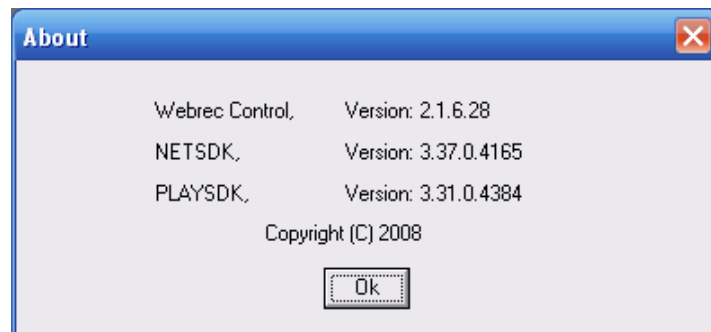
Type	Parameter	Function
Alarm Type	Video loss	System alarms when video loss occurs.
	Motion Detection	System alarms when motion detection alarm occurs,
	Disk full	System alarms when disk is full.
	Disk error	System alarms when disk error occurs.
	Camera masking	System alarms when camera is viciously masking.
	Encode alarm	System alarms when encode module alarms.
	External alarm	Alarm input device sends out alarm.
Operation	Listening alarm	Check to activate live alarm notification.
	Video	Check to activate pop up video when alarm occurs (listening alarm loss to be activated (listening alarm has be activated).
	Prompt	Automatically pops up alarm dialogue box (listening alarm has be activated).
	Sound pop up	System sends out alarm sound when alarm occurs.
	Path	Specify alarm sound file.

11 About

See chapter 7.3 to see how to access to the configuration menu».



View current web client information.

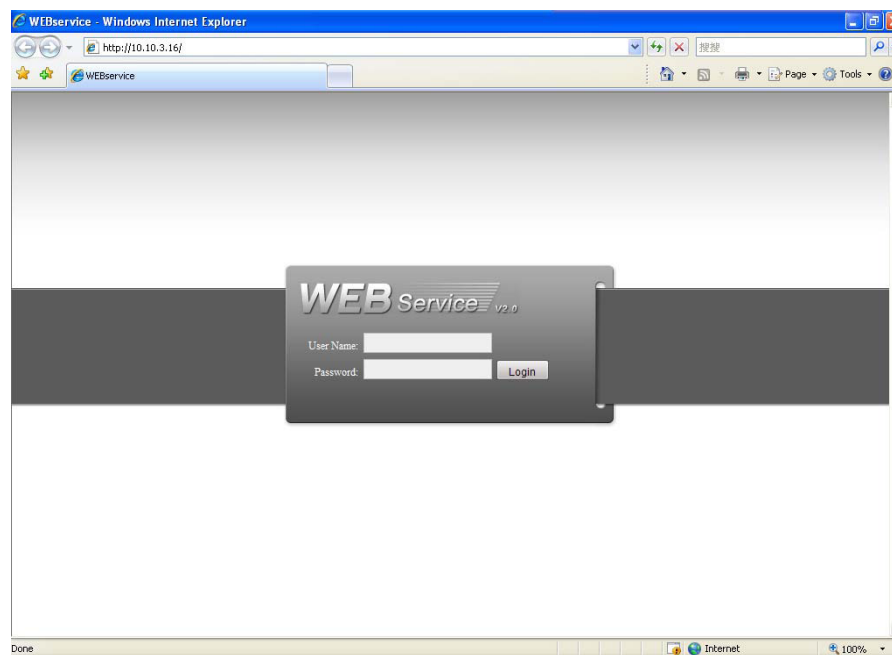


12 Log out

See chapter 7.3 to see how to access to the configuration menu».



System goes back to log in interface.



Annex 1: No-IP DDNS

If you do not have a Static IP address on the Internet, you need to have a dynamic IP. Because your IP address changes after a certain period of time.

So you need to configure a dynamic DNS service.

After completed configuration in the device. DDNS service can constantly inform the latest device's connection IP, and modify its IP on the table of data from the server.

Then you have a constant domain name in the Web browser, along with the HTTP port, send a request to identify the car IP of the domain name typed.

The server will redirect the domain name to the IP connection, thus allowing access to the device which does not have a fixed IP in the network.

Note: It is important to note that to gain access to the device in a local network, it is necessary to redirect the port of your modem or router to your device.

Click DDNS to go to the configuration interface. You can see an interface.

The screenshot shows a 'Configuration' window with a tree view on the left and a 'DDNS' configuration panel on the right. The tree view includes 'Control Panel', 'Query System Info', 'System Config', 'NETWORK', 'ADVANCED', and 'ADDITIONAL FUNCTION'. The 'DDNS' panel has the following fields: 'DDNS Type' (dropdown menu set to 'NO-IP DDNS'), 'Enable' (checkbox checked), 'Server IP' (text box with 'www.yahoo.com'), 'Port' (text box with '5050'), 'Domain Name' (text box with 'www.yahoo.com'), 'User Name' (text box with 'anonymity'), 'Password' (text box with 'XXXX'), and 'Alive Interval(sec.)' (text box with '30'). At the bottom right of the panel are 'Save' and 'Refresh' buttons.

- DDNS Type: You can select from the dropdown list. There are four options: No-IP, DynDNS, CN99, Private.
- Port: input server port here.
- Domain Name: Get the domain name you get from your DDNS service provider.
- User: Get the user name you get from your DDNS service provider.
- Password: Enter corresponding password.

Highlight the icon  in front of Enable to enable the DDNS server configuration.

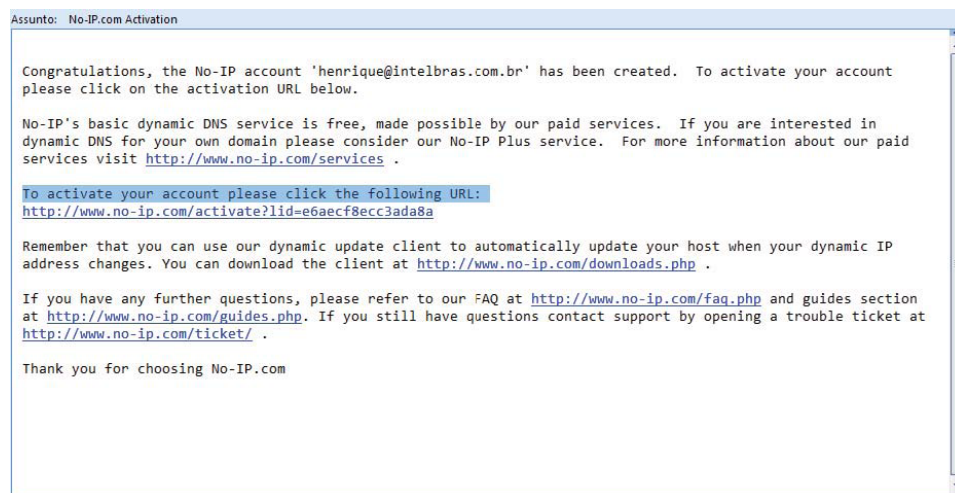
To receive domain name in the No-IP DDNS service, please follow the steps listed below.

1. Please visit www.no-ip.com; the page of No-IP appears as below.



2. Left click mouse on the “Create Account” button, account Information interface

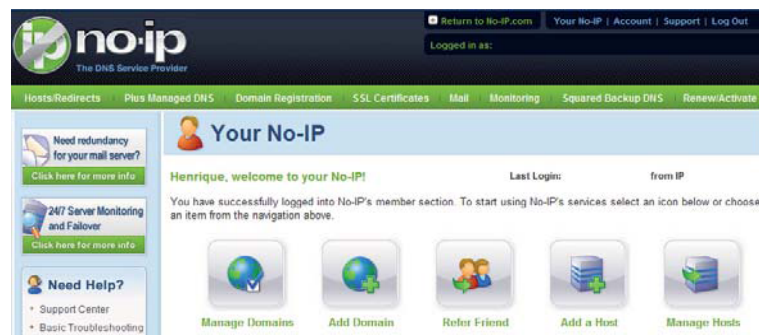
3. Fill in the requested fields and click I Accept button.
Then you can get an email containing username and password.
You can use this account to access the service.
4. Open the e-mail sent by trusted rmação No-IP and double-click the link that is below the phrase “To activate your account please click the following URL:” in the body of the email.



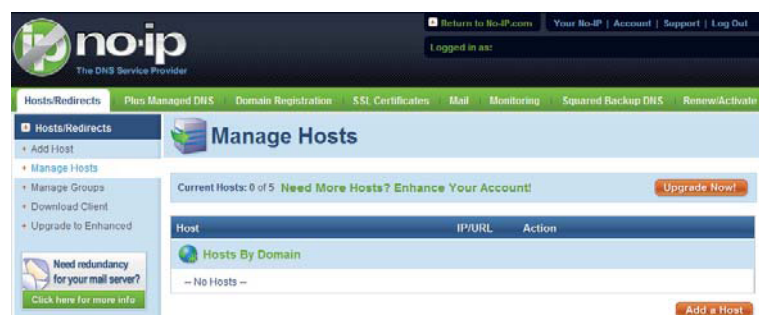
5. Now you can see an interface. You have successfully created an account.



6. Click to sign and enter the email address and password you get earlier. Click "login" to sign up, you can see the welcome interface and configuration option of account. You can highlight manage host item.



7. The Manage Hosts interface is shown below. Click the Add Host button you can access the creation of a domain name.



8. Input corresponding host name in the field. You can use this name to access device from an external network.

In the field to the right of the name, select the desired area.

This is your domain name for access to the device.

Click "Create Host" button at the bottom of the page.

The screenshot shows the 'Add a host' page on the No-IP website. The page has a dark header with the No-IP logo and navigation links. A green sidebar on the left contains links for 'Hosts/Redirects', 'Add Host', 'Manage Hosts', 'Manage Groups', 'Download Client', 'Upgrade to Enhanced', and 'Need Help?'. The main content area is titled 'Add a host' and contains a form to configure a new host. The form includes fields for 'Hostname' (set to 'no-ip.biz'), 'Host Type' (radio buttons for 'DNS Host (A)', 'DNS Host (Round Robin)', and 'DNS Alias (CNAME)', with 'DNS Host (A)' selected), 'IP Address', 'Assign to Group' (set to 'No Group'), and 'Enable Wildcard'. There are also sections for 'Accept Mail for your Domain' and 'Mail Options' with an 'MX Record' field. At the bottom right, there are 'Revert' and 'Create Host' buttons.

9. Now you can see an interface. Here you can view domain name and the computer's current IP setup. If you already have a domain name equal to gurado trusted, you must define another name for the host.

The screenshot shows the 'Manage Hosts' page on the No-IP website. The page has a dark header with the No-IP logo and navigation links. A green sidebar on the left contains links for 'Hosts/Redirects', 'Add Host', 'Manage Hosts', 'Manage Groups', 'Download Client', 'Upgrade to Enhanced', and 'Need Help?'. The main content area is titled 'Manage Hosts' and shows a confirmation message: 'Host vd16s480st.no-ip.biz created'. Below this, it says 'Current Hosts: 1 of 5' and 'Need More Hosts? Enhance Your Account!'. There is a table with columns 'Host', 'IP/URL', and 'Action'. The table contains one entry: 'no-ip.biz' with a sub-entry 'vd16s480st.no-ip.biz' and IP '200.200.200.198'. The 'Action' column has links for 'Modify' and 'Remove'. At the bottom right, there is an 'Add a Host' button.

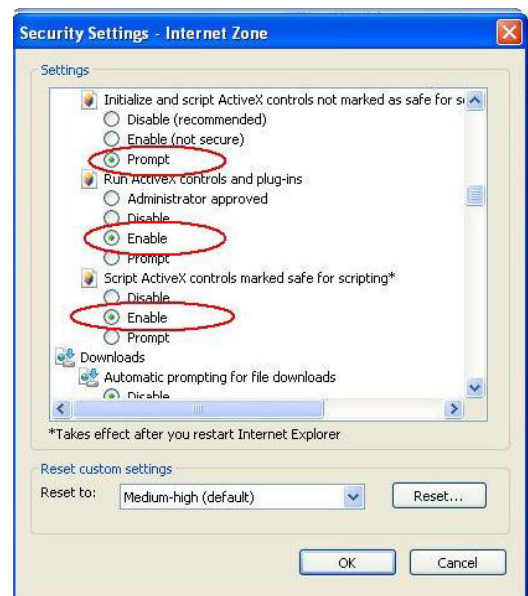
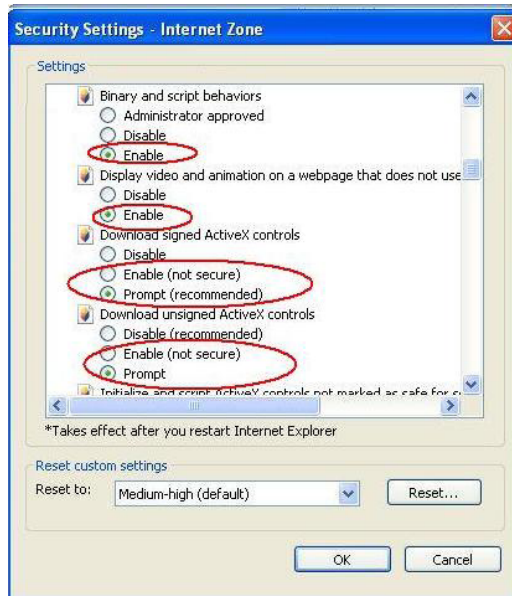
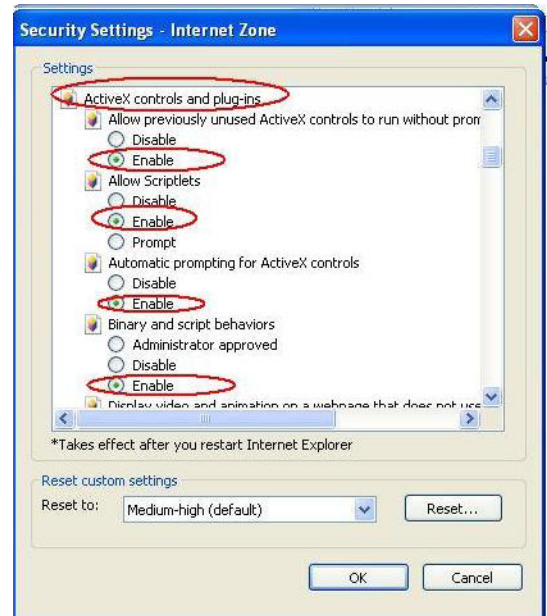
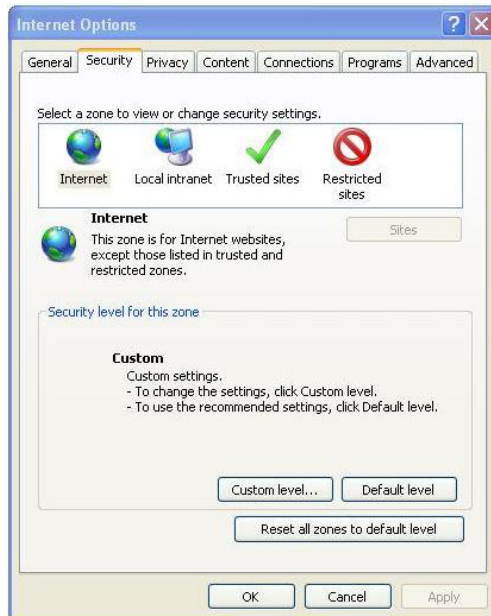
10. Now you need to define the definition of the server's IP in IP-device able to access this service DDNS. To get DDNS service, you need to have a computer connected to the Internet on the same network with device. Type the command ping dynupdate.no-ip.com at the command prompt, Windows ®. The server's IP will be displayed on the screen. Your device can use this IP to find the No-IP server.

```

C:\>ping dynupdate.no-ip.com
Disparando dynupdate.no-ip.com [204.16.252.79] com 32 bytes de dados:
Resposta de 204.16.252.79: bytes=32 tempo=309ms TTL=235
Resposta de 204.16.252.79: bytes=32 tempo=318ms TTL=235
Resposta de 204.16.252.79: bytes=32 tempo=304ms TTL=235
Resposta de 204.16.252.79: bytes=32 tempo=329ms TTL=235
Estatísticas do Ping para 204.16.252.79:
  Pacotes: Enviados = 4, Recebidos = 4, Perdidos = 0 (0% de
perda),
Aproximar um número redondo de vezes em milissegundos:
  Mínimo = 304ms, Máximo = 329ms, Média = 315ms
C:\>_

```

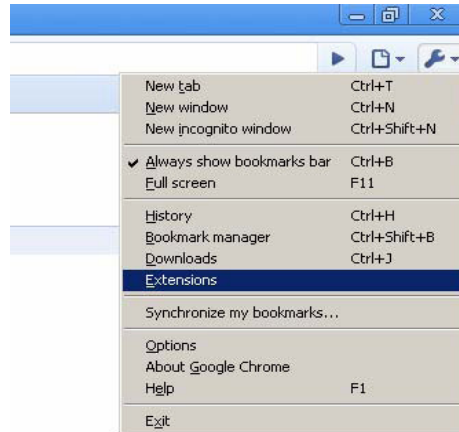
11. Please go to the device and access the MAIN MENU> SETTING> NETWORK> DDNS. Input server IP you get in the above step. Select the DDNS Type as No-IP DDNS and highlight the icon ☐ in front of Enable to enable the DDNS function. Now fill the fields as described below, and click OK to save current setup.
 - **Server IP:** Enter the IP noted in step 10.
 - **Port:** Enter the port 80.
 - **Domain Name:** Enter the domain name created in step 8.
 - **User:** Enter your username (email address) created in step 3.
 - **Password:** Enter the password created in step 3.
12. Now you have completed device setup. Open Internet Explorer® in another foreign network with Internet access, unlike the network where the device is connected to, you need to follow the steps listed below:
 1. Enter the address into your browser: http://nome the field created in step 8.
For example: http://vd16s480st.no-ip.biz
 2. If the device HTTP port is 80, just type the domain name. Otherwise, enter in the browser address as:
http://nome the field created in Step 8: port number of HTTP.
For example: http://vd16s480st.no-ip.biz:9090
 3. Press Enter. The system will ask install application webrec.cab control or not. Please click Yes to perform a successful connection.
 4. If the page does not appear on the computer screen, you need to lower your system safety setup. From Tools> Internet Options> Security, select Internet and then click Custom Level, you can enable ActiveX controls. See below . Then open your browser and re-enter the domain name of the device.



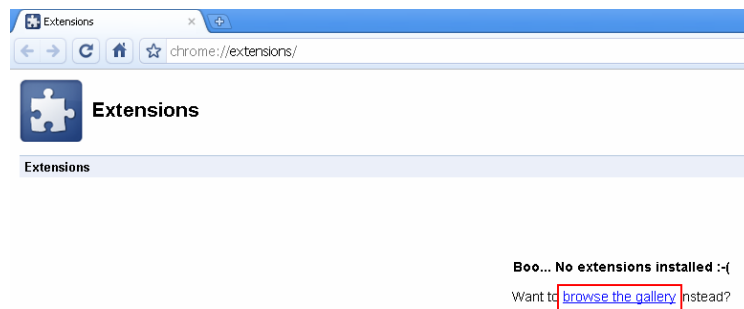
Annex 2: Using Google Chrome

1- Download and Install Extension

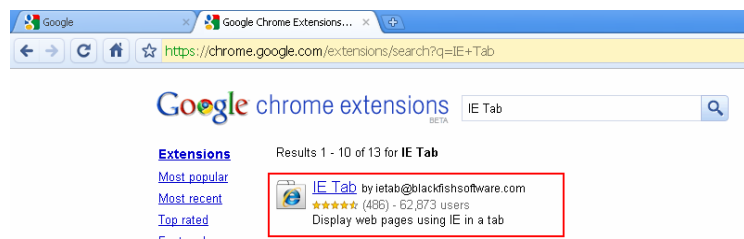
Click “Extension” in Google Chrome configuration dropdown list to go to the extension management interface.



The Google Chrome extension management interface is shown below.



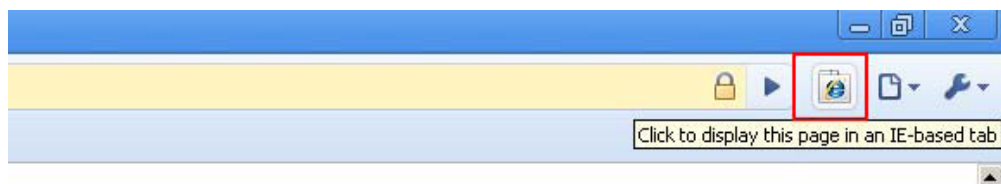
Click “Browse the gallery” and search for “IE Tab” extension.



Install the latest “IE Tab” extension (version 1.0.11208.1 or above).

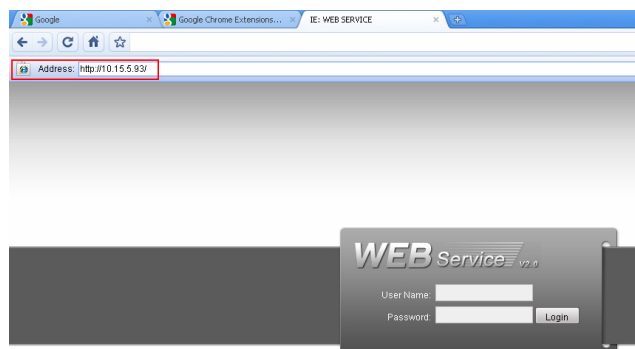


After installation, you will get an IE icon on top right of your Google Chrome interface.



2. Visit Web Interface

- Get an IE address bar by clicking the icon showed previously.
- Enter the IP address of your device.

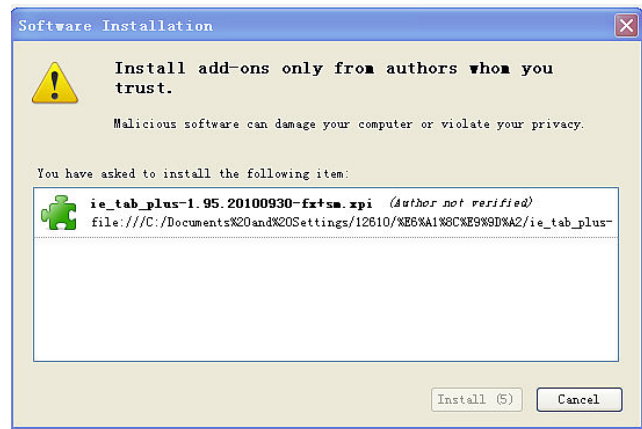


Annex 3: Using Firefox

1- Download and install extension:

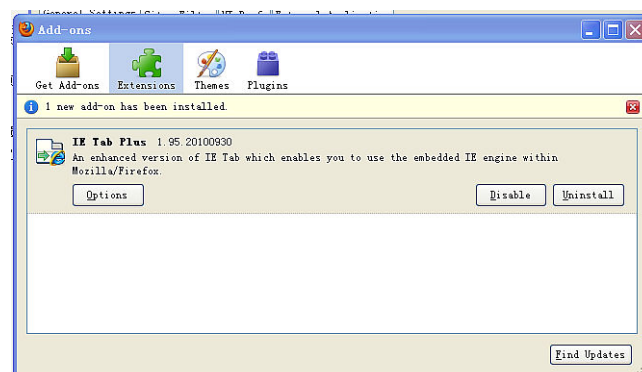
- Click “Tools” and “Add-ons”.

- Search and install IE Tab: ie_tab_plus-1.95.20100930-fx+sm

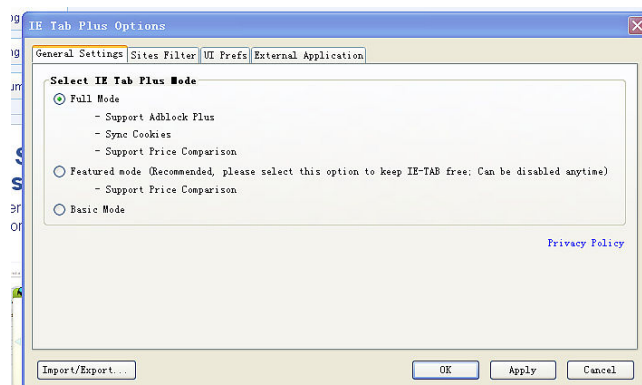


After installation, restart Firefox.

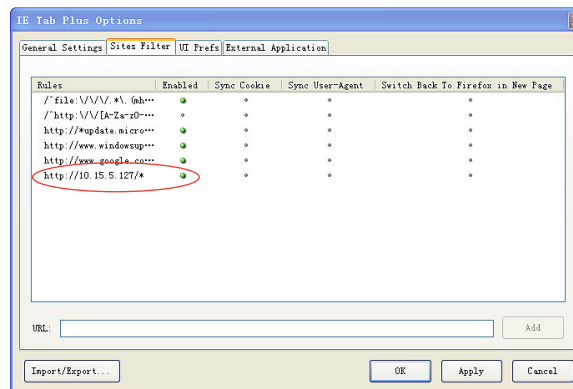
2- After restart of Firefox, choose Tools—Add-ons to check if the plugin has been installed.



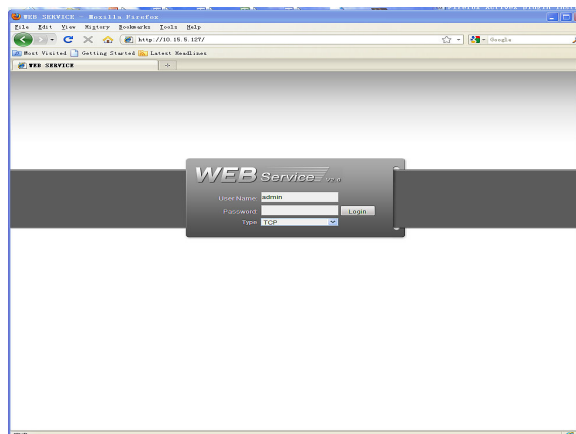
3- After installation, add the target address to IE Tab before start to access device web client.
At the sametime, select IE Tab plus Mode.



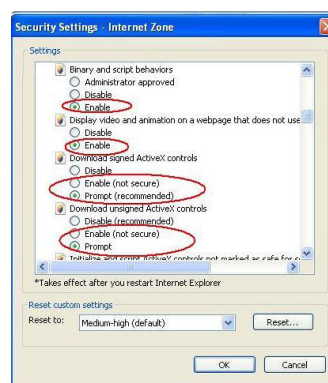
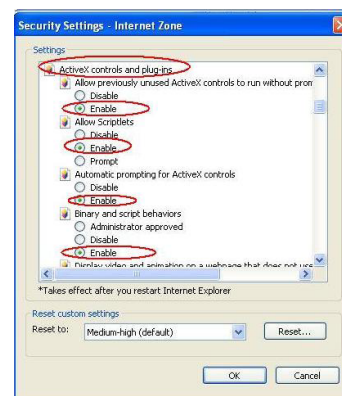
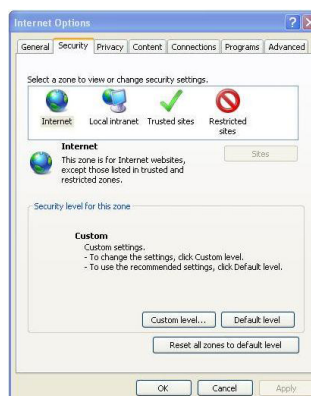
For example, here device address is http://10.15.5.127, so type "http://10.15.5.127/*" to the URL option.



After this, open the webpage <http://10.15.5.127> with Firefox .



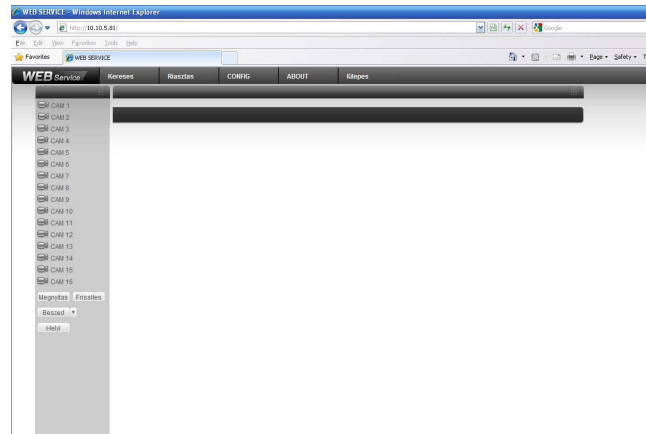
Note : If you have done the follows above and you still can not open the web normally, you need to check the setting in IE to enable downloading of the ActiveX.



Annex 4: Using IE8

1- Run Web interface with IE8

With IE8, sometimes it will not run with the normal mode, there 2 ways to solve this.



1.1 Use the Compatibility View function of IE8

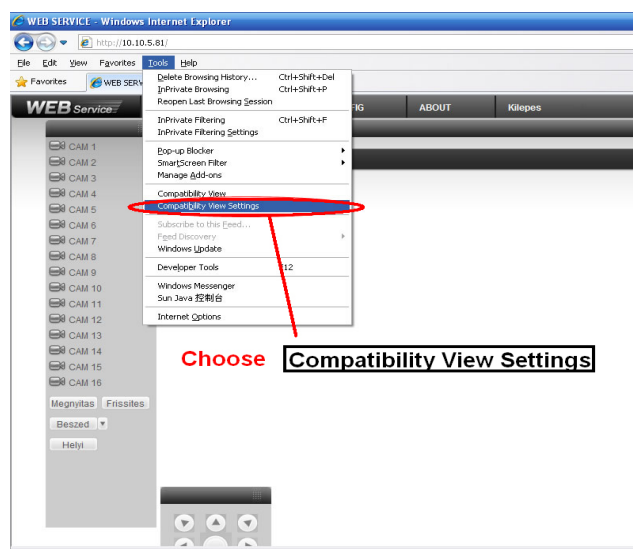
With this way, every time you open the IE interface, must click this button



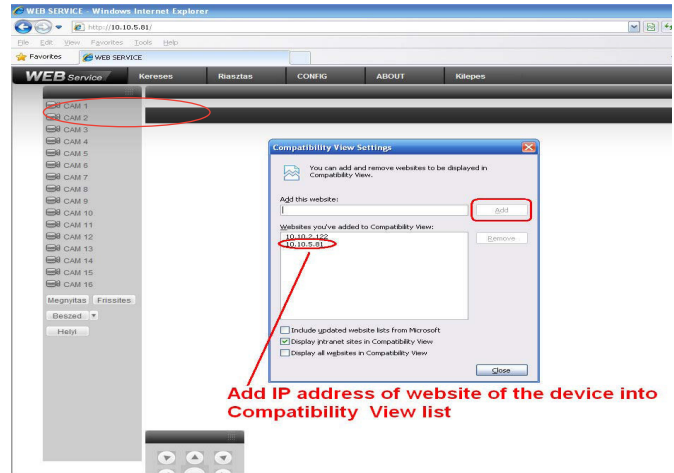
For IE8 if the interface is abnormal, please click the button

1.2 Add the certain IP address or website into Compatibility View Settings

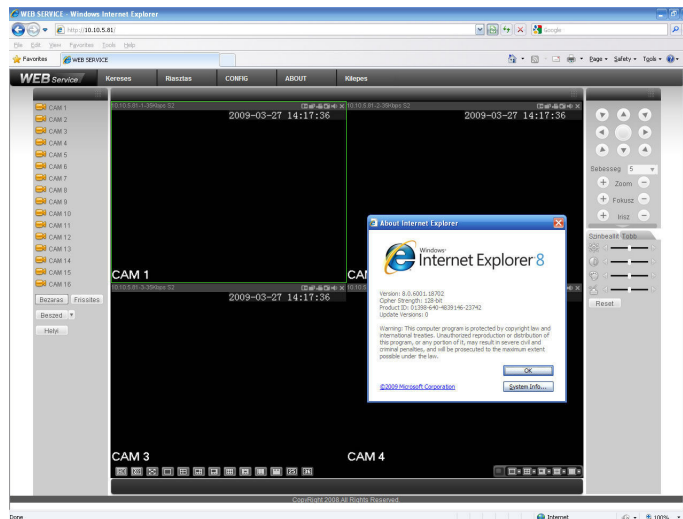
- Choose Compatibility View Settings in Tool menu



- Add the IP or domain name of device into Compatibility View Settings list

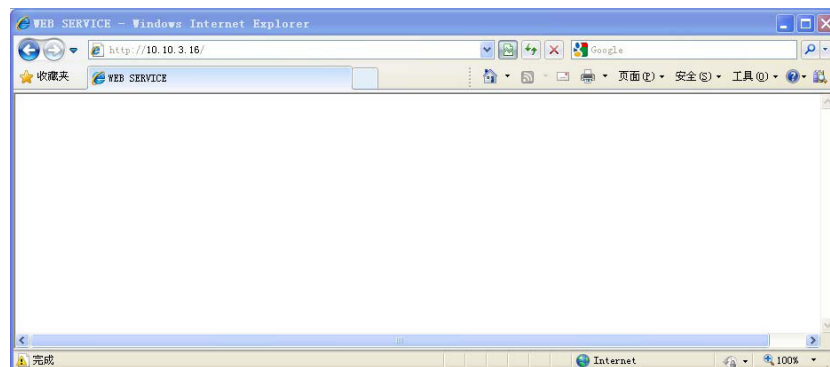


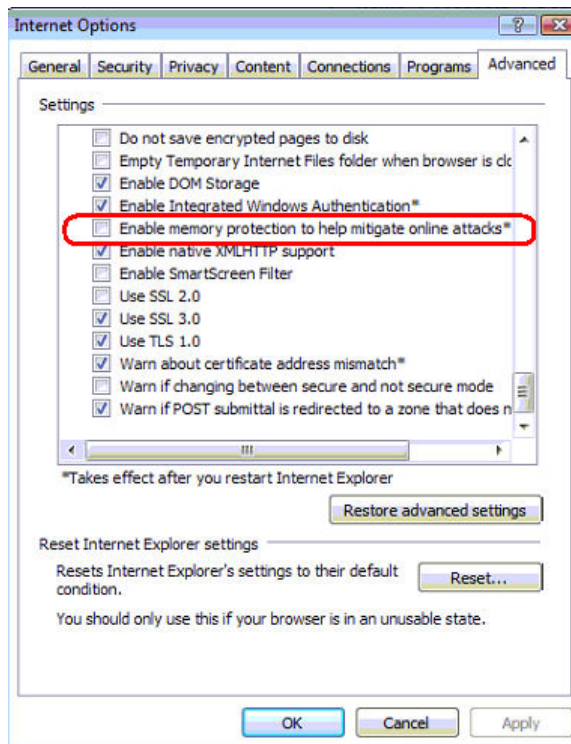
- Now the web interface can be accessed in normal mode.



3- Download ActiveX with IE8

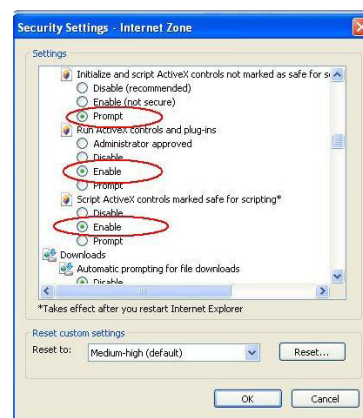
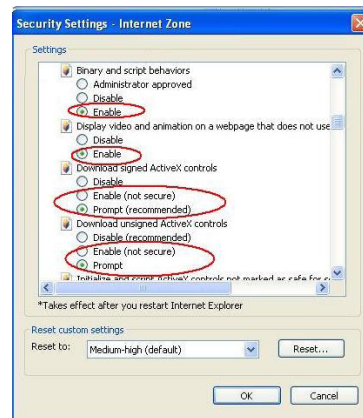
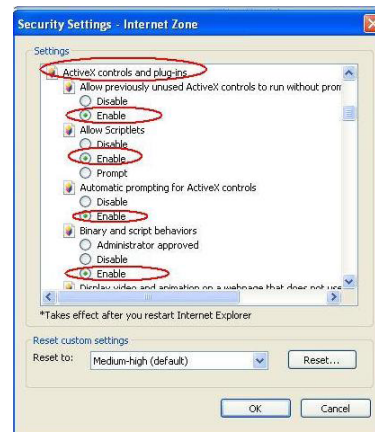
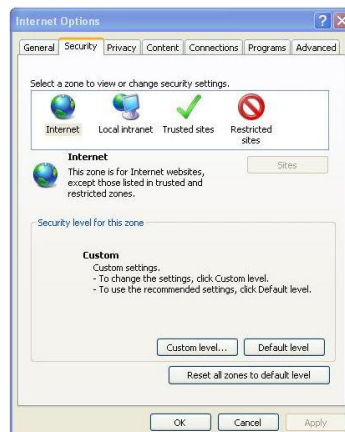
- For some PC when update windows and install IE8, it will not install the ActiveX.





Note :

If you have done the follows above and you still can not open the web normally, you need to check the setting in IE to enable downloading the ActiveX.



Annex 5: Email Function

First, the Email sender must support smtp

1- Email Setting 1

Set as follow, I use Email server: www.126.com as an example

	Désignation
①	Email server IP address (ping the server to get the IP)
②	Must be enable
③	Server port (usually 25)
④	User Name - Password
⑤	Sender. Must be your email address
⑥	Subject. You can set any subject according your needs
⑦	Receiver

```

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\wubing>ping smtp.126.com

Pinging smtp.126.split.netease.com [220.181.15.112] with 32 bytes of data:

Reply from 220.181.15.112: bytes=32 time=53ms TTL=52
Reply from 220.181.15.112: bytes=32 time=42ms TTL=52
Reply from 220.181.15.112: bytes=32 time=42ms TTL=52
Reply from 220.181.15.112: bytes=32 time=42ms TTL=52

Ping statistics for 220.181.15.112:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 42ms, Maximum = 53ms, Average = 44ms

C:\Documents and Settings\wubing>
  
```

- Ping the email server to get the ipaddress, for example: ping smtp.126.com to get ip:220.181.15.112
- Input user name and password of the account e.g.: Username: user. Password: pass
- Input sender: must the whole email address of the sender, for example: user@126.com
- Set Subject: any title according your need
- Input receiver email address

2- Email Setting 2

- Input domain name of the email server, such as:smtp.126.com, if you have already set DNS settings

Configuration Panel - EMAIL

SMTP Server: smtp.126.com (1) ☒ Enable (2)

Port: 25 (3) 0~65535

User Name: user (4)

Password: (5)

Sender: user@126.com (5)

Subject: (6)

Receiver 1: (7)

Receiver 2: (7)

Receiver 3: (7)

Save Refresh

	Désignation
①	Email server: if it is domain name, set DNS as follow
②	Must be enable
③	Server port (usually 25)
④	User Name - Password
⑤	Sender. Must be your email address
⑥	Subject. Set any subject according your needs
⑦	Receiver

- DNS Setting

Configuration Panel - NETWORK

Ethernet Port: Port 01 ☐ DHCP

IP Address: 10 . 12 . 5 . 28 Mac Address: 00:11:22:33:45:55

Subnet Mask: 255 . 255 . 0 . 0

Gateway: 10 . 12 . 0 . 1

Device Name: 00-11-22-44-55

TCP Port: 37777 HTTP Port: 80

UDP Port: 37778 Max Connection: 4

Preferred DNS: 202 . 101 . 172 . 35

Alternate DNS: 202 . 101 . 172 . 35

☐ Transfer Latency

Service Type: MULTICAST

User Name: IP Address: 239 . 255 . 42 . 42

Password: Port: 36666 1~65535

Default Save Refresh

Get the DNS address from your network administrator

- Get DNS setting from your PC in the same network by command: `ipconfig /all`

```

C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\wubing>ipconfig /all

Windows IP Configuration

Host Name . . . . . : dell-c3769d3061
Primary Dns Suffix . . . . . :
Node Type . . . . . : Unknown
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

Ethernet adapter 本地连接:

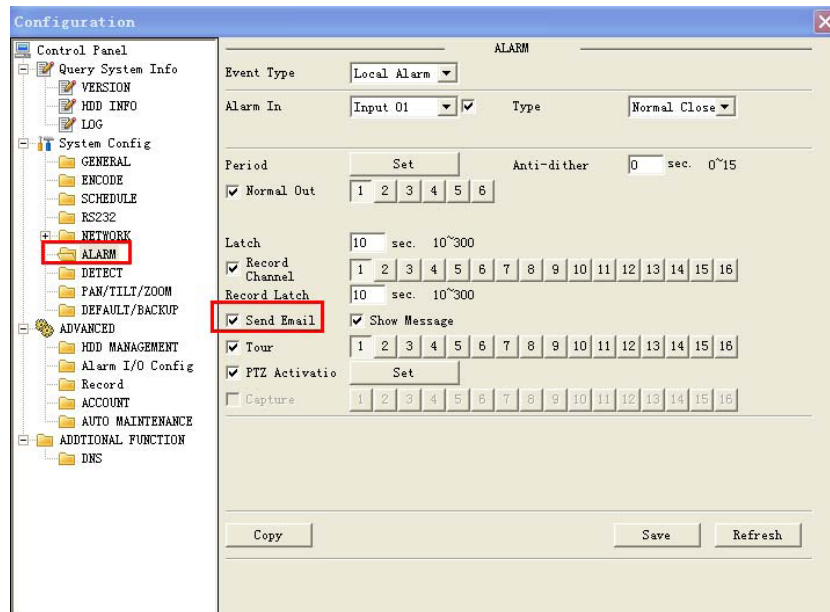
Connection-specific DNS Suffix . :
Description . . . . . : Broadcom NetXtreme 57xx Gigabit Controller
Physical Address. . . . . : 00-1D-09-2F-4E-CC
Dhcp Enabled. . . . . : No
IP Address. . . . . : 10.10.2.144
Subnet Mask . . . . . : 255.255.0.0
Default Gateway . . . . . : 10.10.0.1
DNS Servers . . . . . : 202.101.172.35
                       221.12.1.228

C:\Documents and Settings\wubing>

```

3- Send Email Setting

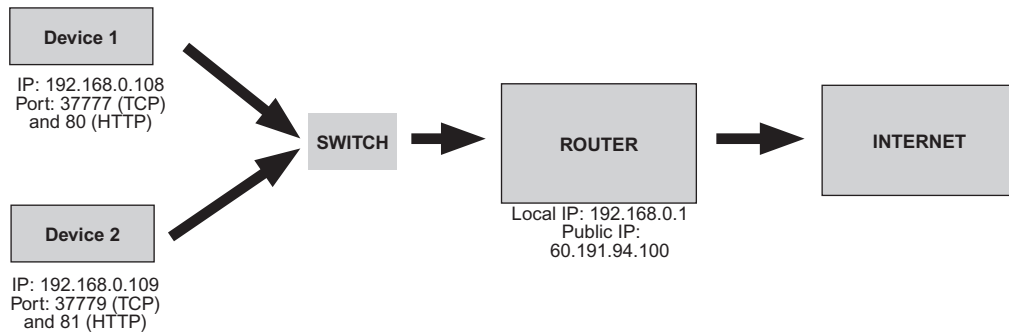
- Enable “send email function” of Detect or Alarm settings, so when there are alarms the device will send Email.



Annex 6: Routers configuration

If you need to access to your device from external network, you will need to set NAT settings on your router.

In the circumstance that your device is behind a router or gateway, you need to open the port on that router for the device behind it.



ROUTER NAT Settings			
IP Address	Private Port	Public Port	Enable/Disable
192.168.0.108	37777	37777	Enable
192.168.0.108	80	80	Enable
192.168.0.109	37779	37779	Enable
192.168.0.109	81	81	Enable

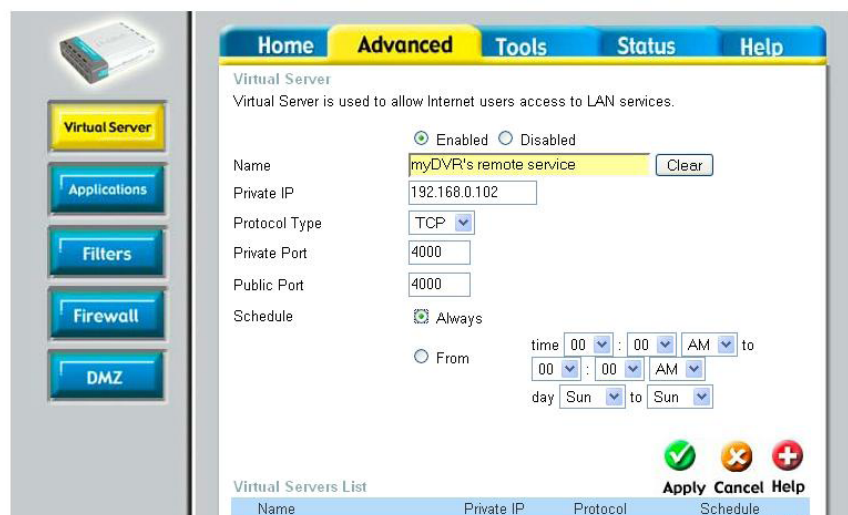
Local IP	HTTP Port	TCP Port	Public IP	HTTP Port	TCP Port
Device 1 192.168.0.108	80	37777	60.191.94.100	80	37777
Device 2 192.168.0.109	81	37779	60.191.94.100	81	37779

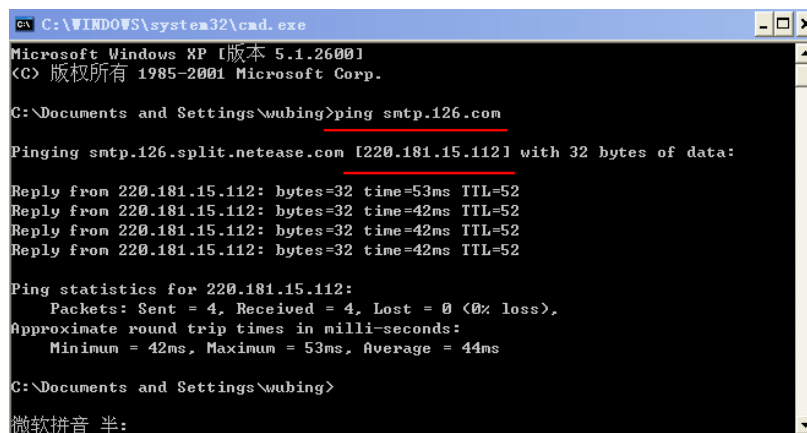
To access Device 1, input the IP address: `http://60.191.94.100`

To access Device 2, input the IP address: `http://60.191.94.100:81`

1- D-LINK Router (interface may very depending of the device)

Log on to the router. Select “Advanced” tab on the top, and click on “Virtual Server” button on the left. The following page will be displayed. The screen might be very different regarding to the different model of routers.





```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\wubing>ping smtp.126.com

Pinging smtp.126.split.netease.com [220.181.15.112] with 32 bytes of data:

Reply from 220.181.15.112: bytes=32 time=53ms TTL=52
Reply from 220.181.15.112: bytes=32 time=42ms TTL=52
Reply from 220.181.15.112: bytes=32 time=42ms TTL=52
Reply from 220.181.15.112: bytes=32 time=42ms TTL=52

Ping statistics for 220.181.15.112:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 42ms, Maximum = 53ms, Average = 44ms

C:\Documents and Settings\wubing>
```

Note :

Do not copy the information in this sample configuration. It is different according the setting on each device.

The picture above shows an example of how to open the service port on router for a device in local network.

- Check the "Enabled" button.
- In "Name" box, type in a name for this router's entry. For example: "myDVR's Remote Service"
- In "Private IP" box, type in the IP address of device which is the IP you put in "IP ADDRESS" field in "Network" setting menu on device. For example: "192.168.0.102".
- Select "TCP" in "Protocol Type" drop down menu.
- In both "Private Port" and "Public Port", type in the service port number. In above example, it is 4000. The port number is the port that you put in "TCP PORT" field in "NETWORK" menu on the device.
- Select "Always" button.

After click "Apply", the service port 4000 will be opened on the router for the device on 192.168.0.102. The device Net View and other client tools will be able to connect to this device from public network by connecting to the router's IP address.

Follow the same process, add another entry for HTTP Port service. After this service port is open, the web browser client from public network will be able to connect to this device by connecting to the router's IP address.

2- LINK SYS Router

Log on to the router. Select “Applications & Gaming” tab on the top. Select “UPNP Forwarding” tab on the left. Then the following screen will be displayed. The screen might be very different regarding to the different model of routers.

Application	Ext. Port	TCP/UDP	Int. Port	IP Address	Enable
FTP	21	☒ TCP ☐ UDP	21	0	☐
Telnet	23	☒ TCP ☐ UDP	23	0	☐
SMTP	25	☒ TCP ☐ UDP	25	0	☐
DNS	53	☒ TCP ☐ UDP	53	0	☐
TFTP	69	☒ TCP ☐ UDP	69	0	☐
Traceroute	79	☒ TCP ☐ UDP	79	0	☐
HTTP	80	☒ TCP ☐ UDP	80	0	☐
POP3	110	☒ TCP ☐ UDP	110	0	☐
NNTP	119	☒ TCP ☐ UDP	119	0	☐
SNMP	161	☒ TCP ☐ UDP	161	0	☐
	0	☒ TCP ☐ UDP	0	0	☐
	0	☒ TCP ☐ UDP	0	0	☐
	0	☒ TCP ☐ UDP	0	0	☐
	0	☒ TCP ☐ UDP	0	0	☐
	0	☒ TCP ☐ UDP	0	0	☐

You can add entry on the first available row in the list table.

- In the “Application” box, type in the entry name you want to use. For example: MyDVR’s Service, for the service port we are opening for DVR’s remote service.

- In the “Ext Port” box, type in the service port you put in the DVR’s network setting. For example: 4000.

- Select “TCP” button.

- In “Int Port” box, type in the same port number you put in “Ext. Port” box. For example: 4000.

- In “IP Addr.” box, type in the last decimal digit of your DVR’s IP address. For example, the device’s IP address is 192.168.0.102, so type in 102 in this box.

- Check the “Enable” box to enable port forwarding.

Follow the same process, add another entry, open the HTTP Port on the router for this device.

Click the “Save Setting” button, the router might need to restart. After the these settings have been activated, the web browser client, device Net View client or other client tools will be able to access the device from public network.

3 SMC Router

Log on to the router, select “Advanced Setup” tab on the top, and click “NAT” button on the left panel. Select “Virtual Server” in the expanded list structure, you will see the following screen. Notice that it might look very different according to different models of routers.

	Private IP	Private Port	Type	Public Port
1.	192.168.2.		☐ TCP ☐ UDP	
2.	192.168.2.		☐ TCP ☐ UDP	
3.	192.168.2.		☐ TCP ☐ UDP	
4.	192.168.2.		☐ TCP ☐ UDP	
5.	192.168.2.		☐ TCP ☐ UDP	

- In “Private IP” column, put in the last decimal digit of your DVR’s IP address. For example, your device’s IP address is 192.168.2.102, so put 102 in this box.

- In “Private Port” column, put in the service port number you put in the DVR network settings. For example: 4000.

- In “Type” column, select the “TCP” radio button.

- In “Public Port” column, put in the same service port number you put in the “Private Port” box, for example, 4000.

Follow the same process, add another entry for HTTP Port on the router.

Click “Apply” button and confirm if it prompts to restart the router. After the new configuration is activated, the web browser clients or other DVR clients tools from public network will be able to access the device.